

# Service Manual

ViewSonic VX2262wm/wmp  
Model No VS12132  
22" Color TFT LCD Display



**Manufacture Date: Apr-24-08**

## Copyright Information

Copyright © ViewSonic<sup>®</sup> Corporation, 2006. All rights reserved.

Macintosh and Power Macintosh are registered trademarks of Apple Computer, Inc. Microsoft, Windows, Windows NT, and the Windows logo are registered trademarks of Microsoft Corporation in the United States and other countries.

ViewSonic, the three birds logo, OnView, ViewMatch, and ViewMeter are registered trademarks of ViewSonic Corporation.

VESA is a registered trademark of the Video Electronics Standards Association. DPMS and DDC are trademarks of VESA.

ENERGY STAR<sup>®</sup> is a registered trademark of the U.S. Environmental Protection Agency (EPA). As an ENERGY STAR<sup>®</sup> partner, ViewSonic Corporation has determined that this product meets the ENERGY STAR<sup>®</sup> guidelines for energy efficiency.

Disclaimer: ViewSonic Corporation shall not be liable for technical or editorial errors or omissions contained herein; nor for incidental or consequential damages resulting from furnishing this material, or the performance or use of this product.

In the interest of continuing product improvement, ViewSonic Corporation reserves the right to change product specifications without notice. Information in this document may change without notice.

No part of this document may be copied, reproduced, or transmitted by any means, for any purpose without prior written permission from ViewSonic Corporation.

Copyright © ViewSonic<sup>®</sup> Corporation, 2006. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or manual or otherwise, without the prior written permission of ViewSonic<sup>®</sup> Corporation.

## Revision History

Revision	Date	Description of changes	Approval
<b>A01</b>	<b>Apr-24-08</b>	<b>Initial Release</b> (TC8MM8MKWHVSD1J)	<b>YG.WANG</b>

## TABLE OF CONTENTS

1. Precautions And Safety Notices	4
2. Specification	7
3. Front Panel Control And Indicators	10
4. Circuit Description	17
5. Adjustment Procedure	25
6. Troubleshooting Flow Chart	43
7. Recommended Spare Parts List	44
8. Exploded Diagram And Spare Parts List	60
9. Disassemble Process	64
10. Block Diagram	68
11. Schematic Diagram	69
12. PCB Layout Diagram	77

## 1. Precautions And Safety Notices

### 1.1 SAFETY PRECAUTIONS

This monitor is manufactured and tested on a ground principle that a user's safety comes first. However, improper use or installation may cause damage to the monitor as well as the user. Carefully go over the following WARNINGS before installing and keep this guide handy.

#### WARNINGS

- . This monitor should be operated only at the correct power sources indicated on the label on the rear end of the monitor. If you're unsure of the power supply in your residence, consult your local dealer or power company.
- . Use only the special power adapter that comes with this monitor for power input.
- . Do not try to repair the monitor your self as it contains no user-serviceable parts. This monitor should only be repaired by a qualified technician.
- . Do not remove the monitor cabinet. There is high-voltage parts inside that may cause electric shock to human bodies, even when the power cord is unplugged.
- . Stop using the monitor if the cabinet is damaged. Have it checked by a service technician.
- . Put your monitor only in a clean, dry environment. If it gets wet, unplug the power cable immediately and consult your service technician.
- . Always unplug the monitor before cleaning it .Clean the cabinet with a clean, dry cloth. Apply non-ammonia based cleaner onto the cloth, not directly onto the glass screen.
- . Keep the monitor away from magnetic objects, motors, TV sets, and transformer.
- . Do not place heavy objects on the monitor or power cord.







### 1.2 PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety visual inspections and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltages, wattage, etc. Before replacing any of these components read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire ,or other hazards.

### 1.3 SERVICE NOTES

1. When replacing parts or circuit boards, clamp the lead wires around terminals before soldering.
2. When replacing a high wattage resistor(more than 1W of metal oxide film resistor) in circuit board, keep the resistor about 5mm away from circuit board.
3. Keep wires away from high voltage, high temperature components and sharp edges.
4. Keep wires in their original position so as to reduce interference.
5. Usage of this product please refer to also user's manual.

#### 1.4 HANDING AND PLACING METHODS

Correct Methods:	Incorrect Methods:
Only touch the metal frame of the LCD panel or the front cover of the monitor. Do not touch the surface of the polarizer.	Surface of the LCD panel is pressed by fingers and that may cause "Mura."
	
	
Take out the monitor with cushions	Taking out the monitor by grasping the LCD panel. That may cause "Mura."
	
Place the monitor on a clean and soft foam pad.	Placing the monitor on foreign objects. That could scratch the surface of the panel or cause "Mura."





Place the monitor on the lap, the panel surface must be upwards.



The panel is placed facedown on the lap. That may cause "Mura."



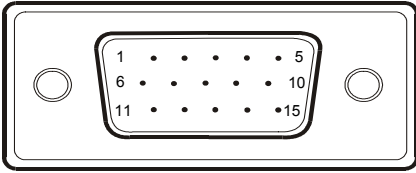
## 2. Specification

### 2.1 PRODUCT SPECIFICATIONS

LCD	Type	22" (full 22" wide viewable diagonal area), TFT(Thin Film Transistor), Active Matrix WXGA+LCD, 0.282mm pixel pitch
	Color Filter	RGB vertical stripe
	Glass Surface	Anti-Glare
Input Signal	Video Sync	RGB analog(0.7/1.0 Vp-p, 75ohms)/TMDS Digital(100ohms) Composite Sync, Separate Sync, Sync on Green Fh:24-83 kHz, Fv:50-76 Hz
Compatibility	PC Macintosh	Up to 1680 x 1050 Non-interlaced Power Macintosh up to 1680 x 1050
Resolution	Recommended and supported	1680 x 1050 @ 60 Hz 1440 x 900 @ 60, 75 Hz 1280 x 1024 @ 60, 75 Hz 1024 x 768 @ 60, 70, 72, 75 Hz 800 x 600 @ 56, 60, 72, 75 Hz 640 x 480 @ 60, 75 Hz 720 x 400 @ 70 Hz
Power	Voltage	100V~240 VAC, 50/60Hz (auto switch)
Display area	Full Scan	473.76mm(H) x 296.1mm(V) 18.65"(H) x 11.66"(V)
Operating conditions	Temperature Humidity Altitude	32°F to + 104°F( 0°C to + 40°C) 10%C to + 90%(non-condensing) To 10,000 feet
Storage conditions	Temperature Humidity Altitude	-4°F to + 140°F( -20°C to + 60°C) 10%C to + 90%(non-condensing) To 40,000 feet
Dimensions	Physical	508.7mm(W) x 440.55mm(H) x 202.84mm(D) 20.02"(W) x 17.34"(H) x 7.98"(D)
Weight	Physical	12.23 lb(5.56 kg)
Regulations		BSMI, VCCI,CCC, PSB, C-Tick, MIC, CE, Gost-R/Hygienic, Ukraine, MPRII, ISO13406-2, SASO, TUVdotcom, UL/cUL, FCC-B, ICES-B, TUV-S/IRAM/UL-AR S Mark, NOM, ENERGY STAR <sup>®</sup>
Power saving modes	On Off	45W (Typical) (blue LED) <1W
<b>Preset Timing Mode</b> (pre-adjusted to VESA <sup>®</sup> 1680 x 1050 @ 60 Hz) <b>Warning:</b> Do not set the graphics card in your computer to exceed these refresh rates; doing so may result in permanent damage to the LCD display.		
<sup>1</sup> Macintosh computers older than G3 require a ViewSonic <sup>®</sup> Macintosh adapter. To order an adapter, contact ViewSonic.		

## 2.2 INTERFACE DESCRIPTION

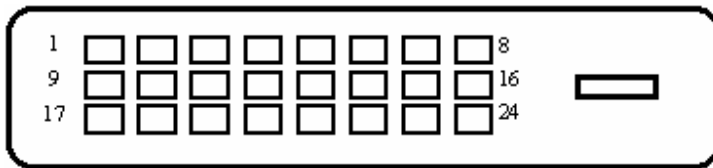
### D-SUB 15 PIN CONNECTOR



Pin Number	Pin Function
1	Red video input
2	Green video input
3	Blue video input
4	No Connection
5	Ground
6	Red video ground
7	Green video ground
8	Blue video ground
9	+5V
10	H/V sync ground
11	No connection
12	(SDA)
13	Horizontal sync (Composite sync)
14	Vertical sync
15	(SCL)

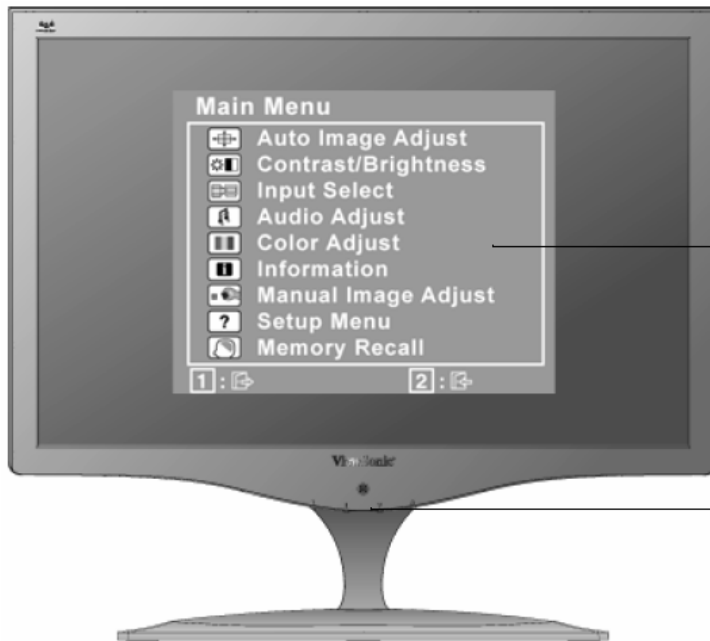


## DVI-D 24 PIN CONNECTOR



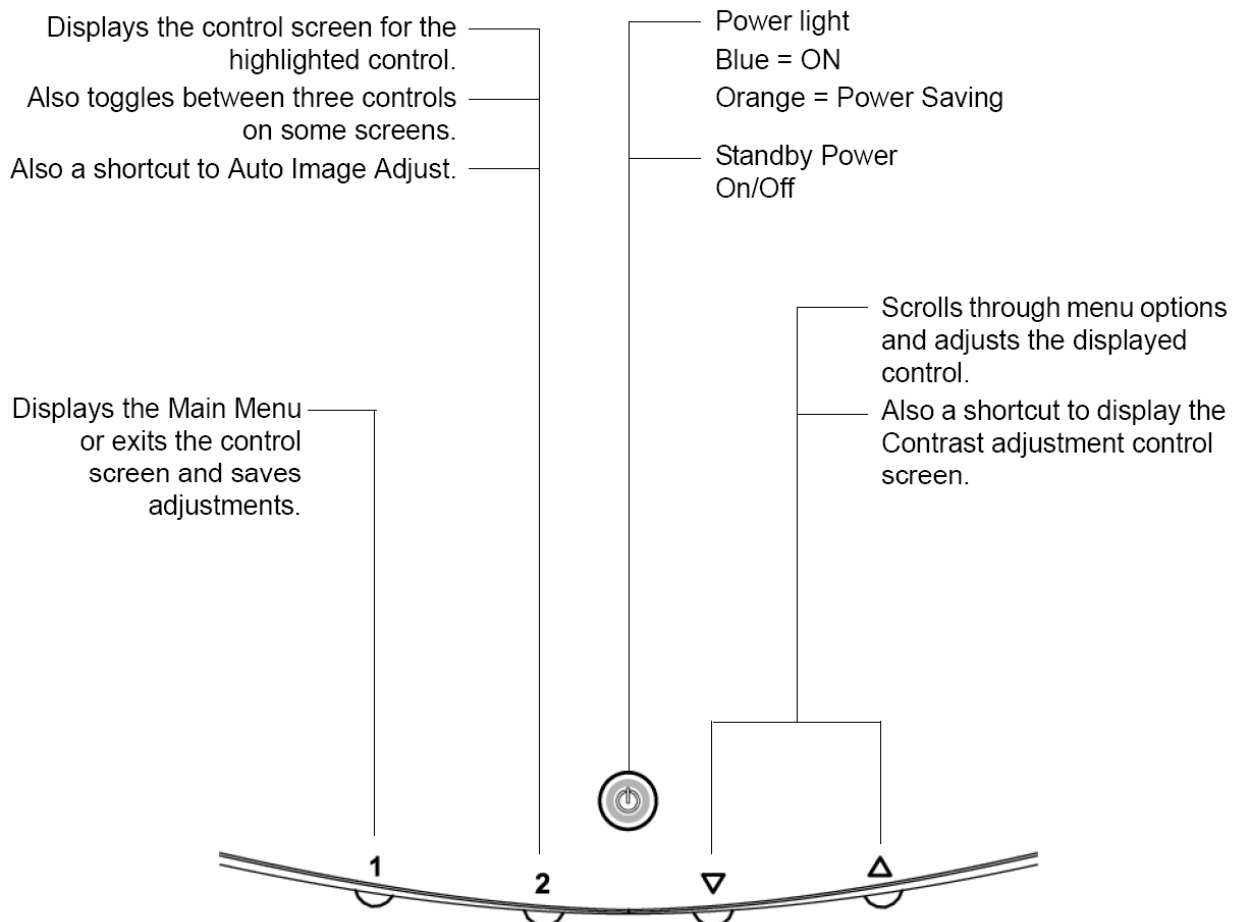
Pin No.	Signal Name	Description
1	RX2-	TMDS negative differential input, channel 2
2	RX2+	TMDS positive differential input, channel 2
3	GND	Logic Ground
4	Reserved 4	Reserved. No connection
5	Reserved 5	Reserved. No connection
6	DDC-CLK	DDC2B Clock
7	DDC-DAT	DDC2B Data
8	Reserved 8	Reserved. No connection
9	RX1-	TMDS negative differential input, channel 1
10	RX1+	TMDS positive differential input, channel 1
11	GND	Logic Ground
12	Reserved 12	Reserved. No connection
13	Reserved 13	Reserved. No connection
14	VCCX	Power
15	GND	Logic Ground
16	SENS	SENSE Pin, Pull High
17	RX0-	TMDS negative differential input, channel 0
18	RX0+	TMDS positive differential input, channel 0
19	GND	Logic Ground
20	Reserved 20	Reserved. No connection
21	Reserved 21	Reserved. No connection
22	GND	Logic Ground
23	RXC+	TMDS positive differential input, reference clock
24	RXC-	TMDS negative differential input, reference clock

### 3. Front Panel Function Controls And Indicators



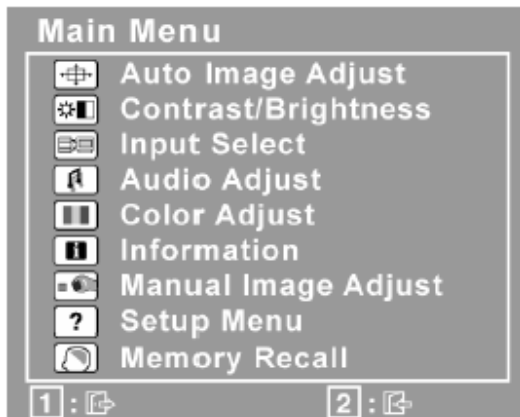
**Main Menu**  
with OSD controls

**Front Control Panel**  
shown below in detail



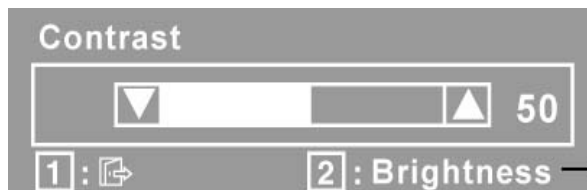
**Do the following to adjust the display setting:**

1. To display the Main Menu, press button [1].



**NOTE:** All OSD menus and adjustment screens disappear automatically after about 15 seconds. This is adjustable through the OSD timeout setting in the setup menu.

2. To select a control to adjust, press ▲ or ▼ to scroll up or down in the Main Menu.
3. After the desired control is selected, press button [2]. A control screen like the one shown below appears.



The line at the bottom of the screen shows the current functions of buttons 1 and 2: Exit or select the Brightness control.

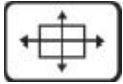


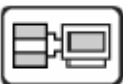
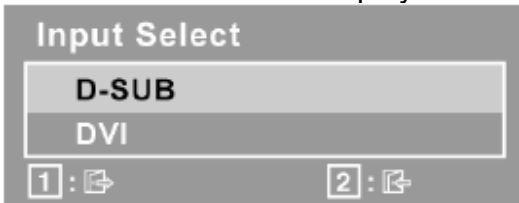


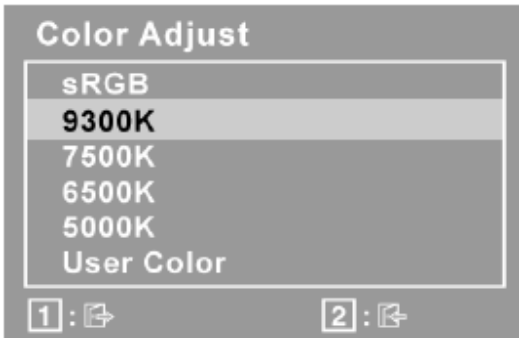
4. To adjust the control, press the up ▲ or ▼ down buttons.
5. To save the adjustments and exit the menu, press button [1] *twice*.


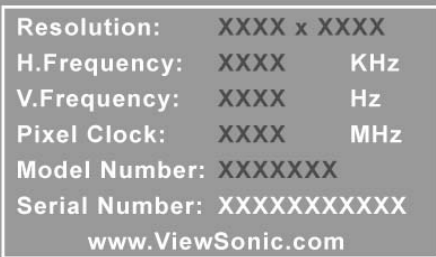

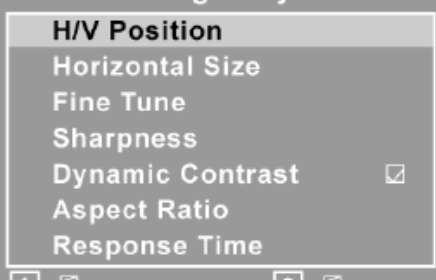
**The following tips may help you optimize your display:**

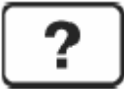
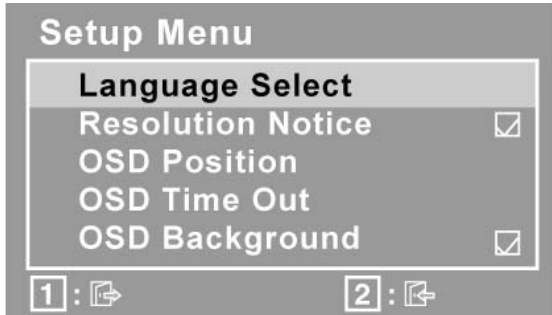

- Adjust the computer's graphics card so that it outputs a 1680 x 1050 @ 60Hz video signal to the LCD display. (Look for instructions on "changing the refresh rate" in the graphics card's user guide.)
- If necessary, make small adjustments using H. POSITION and V. POSITION until the screen image is completely visible. (The black border around the edge of the screen should barely touch the illuminated "active area" of the LCD display.)

## Main Menu Controls

Adjust the menu items shown below by using the up ▲ and down ▼ buttons.

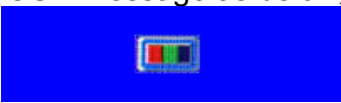
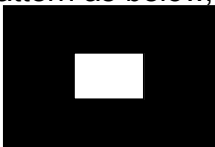
Control	Explanation
	<p><b>Auto Image Adjust</b> automatically sizes, centers, and fine tunes the video signal to eliminate waviness and distortion. Press the [2] button to obtain a sharper image.</p> <p><b>NOTE:</b> Auto Image Adjust works with most common video cards. If this function does not work on your LCD display, then lower the video refresh rate to 60 Hz and set the resolution to its pre-set value.</p>
	<p><b>Contrast</b> adjusts the difference between the image background (black level) and the foreground (white level).</p>
	<p><b>Brightness</b> adjusts background black level of the screen image.</p>
	<p><b>Input Select</b> toggles between inputs if you have more than one computer connected to the LCD Display.</p> 
	<p><b>Audio Adjust</b></p> <p><b>Volume</b> increases the volume, decreases the volume, and mutes the audio.</p> <p><b>Mute</b> temporarily silences audio output.</p>
	<p><b>Color Adjust</b> provides several color adjustment modes, including preset color temperatures and a User Color mode which allows independent adjustment of red (R), green (G), and blue (B). The factory setting for this product is 6500K (6500 Kelvin).</p>  <p><b>sRGB</b>-This is quickly becoming the industry standard for color management, with support being included in many of the latest applications. Enabling this setting allows the LCD display to more accurately display colors the way they were originally intended. Enabling the sRGB setting will cause Contrast and Brightness adjustments to be disabled.</p>

	<p><b>9300K</b>-Adds blue to the screen image for cooler white (used in most office settings with fluorescent lighting).</p> <p><b>7500K</b>-Adds blue to the screen image for cooler white(used in most office settings with fluorescent lighting).</p> <p><b>6500K</b>-Adds red to the screen image for warmer white and richer red.</p> <p><b>5000K</b>-Adds green to the screen image for a darker color.</p> <p><b>User Color</b> Individual adjustments for red (R), green (G), and blue (B).</p> <p>1. To select color (R, G or B) press button [2].</p> <p>2. To adjust selected color, press ▲ and▼.</p> <p><b>Important:</b> If you select <b>RECALL</b> from the Main Menu when the product is set to a Preset Timing Mode, colors return to the 6500K factory preset.</p>
	<p><b>Information</b> displays the timing mode (video signal input) coming from the graphics card in the computer, the LCD model number, the serial number, and the ViewSonic® website URL. See your graphics card's user guide for instructions on changing the resolution and refresh rate (vertical frequency).</p> <p><b>NOTE:</b> VESA 1680 x 1050 @ 60Hz (recommended) means that the resolution is 1680 x 1050 and the refresh rate is 60 Hertz.</p> <div data-bbox="363 1030 833 1361">  <p>1: [Right Arrow]</p> </div>
	<p><b>Manual Image Adjust</b> display the Manual Image Adjust menu</p> <div data-bbox="363 1433 833 1778">  <p>1: [Right Arrow]      2: [Right Arrow]</p> </div> <p><b>H./V. Position (Horizontal/Vertical Position)</b> moves the screen image left or right and up or down.</p> <p><b>H. Size (Horizontal Size)</b> adjusts the width of the screen image.</p>

	<p><b>Fine Tune</b> sharpens the focus by aligning text and/or graphics with pixel boundaries.</p> <p><b>NOTE:</b> Try Auto Image Adjust first.</p> <p><b>Sharpness</b> adjusts the clarity and focus of the screen image.</p> <p><b>Dynamic Contrast</b> allows the user to turn the contrast ratio enhancement on or off.</p> <p><b>Aspect ratio</b> Selects the image size for 4:3, fill aspect ratio &amp; full screen.</p> <p><b>Response Time</b> adjusts the response time of liquid-crystal display for image quality enhancement.</p>
	<p><b>Setup Menu</b> displays the menu shown below:</p>  <p><b>Language Select</b> allows the user to choose the language used in the menus and control screens.</p> <p><b>Resolution Notice</b> advises the optimal resolution to use.</p> <p><b>OSD Position</b> allows the user to move the OSD menus and control screens.</p> <p><b>OSD Timeout</b> sets the length of time the OSD screen is displayed. For example, with a “15 second” setting, if a control is not pushed within 15 seconds, the display screen disappears.</p> <p><b>OSD Background</b> allows the user to turn the OSD background On or Off.</p>
	<p><b>Memory Recall</b> returns the adjustments back to factory settings if the display is operating in a factory Preset Timing Mode listed in the Specifications of this manual.</p>
	<p><b>Exception:</b> This control does not affect changes made with the User Color control, Language Select or Power Lock setting.</p>



## SHORT CUTS FUNCTION FROM THE BUTTONS

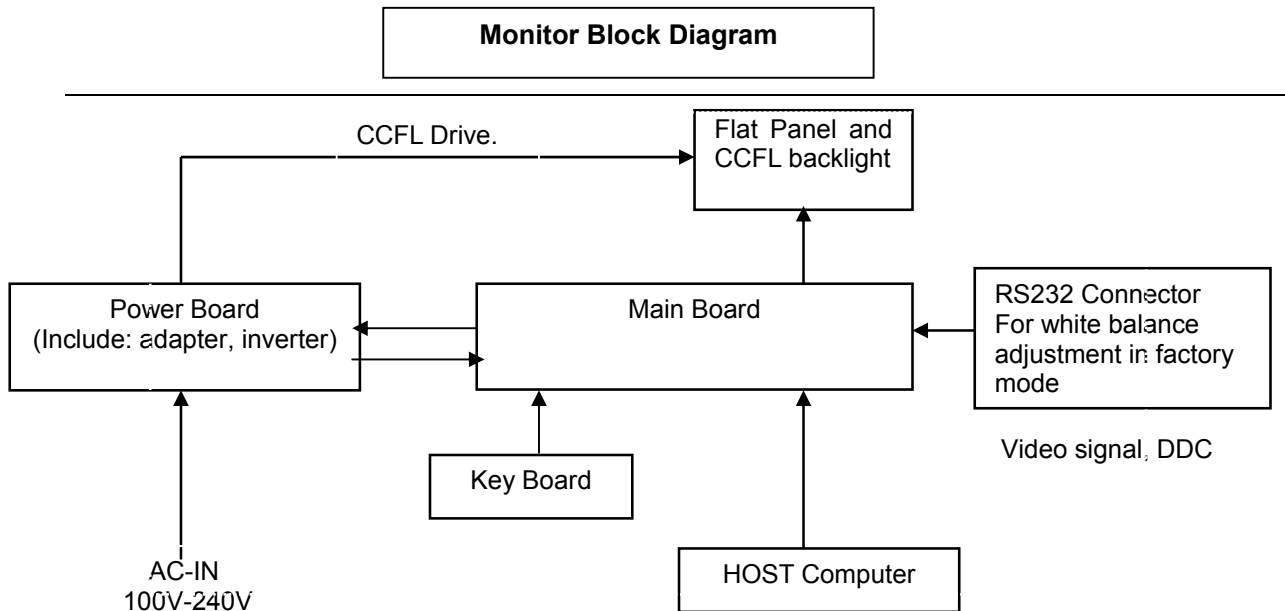
[1]	Main Menu
[2]	Input toggle (D-sub/DVI); refer to Appendix D)
[▼]	To immediately activate Audio menu.
[▲]	To immediately activate Contrast menu. It should be change to Brightness OSD by push button [2]  *1 refer to the Brightness OSD *2 Under sRGB or DCR mode, this function is disabled.
[▼] + [▲]	1. In the CR/ BT menu, Recall both of Contrast and Brightness to default without OSD message. 2. In the Audio menu, Recall both of audio volume and mute to default without OSD message.
[1] + [2]	1. Toggle 720x400 and 640x400 mode when input 720x400 or 640x400 mode. 2. Toggle 1400x1050 and 1680x1050 mode when input 1400x1050 or 1680x1050mode.
[1] + [▼] + [▲] (Keep pushing 5 sec)	White Balance  1. It will not shown on user's guide 2. OSD message as below,  (Image = no blanking) 3. Recommend environment 3.1. Optical (Best) input timing = 640 x 480 @ 60Hz; Following timing modes also recommended, 800 x 600 @ 60 Hz 1024 X 768 @ 60 Hz 3.2. Pattern as below, 
[1] + [▲]	OSD Lock / Unlock
[1] + [▼]	Power Lock / Unlock

[2] + [▼]	<p>Toggle DDC/CI and DDC/2B (DDC/CI enable/disable) and show following message for 3 seconds,</p> <p>When switch to DDC/CI</p> <div data-bbox="566 439 841 510" style="background-color: blue; color: yellow; text-align: center; padding: 2px;">DDC/CI</div> <p>When switch to DDC/2B</p> <div data-bbox="566 582 841 654" style="background-color: blue; color: yellow; text-align: center; padding: 2px;">DDC/2B</div> <p>Default = DDC/CI</p>
Signal + [2] + [🔌]	Factory Mode
Remark : All the short cuts function are only available while OSD off	

## 4. Circuit Description

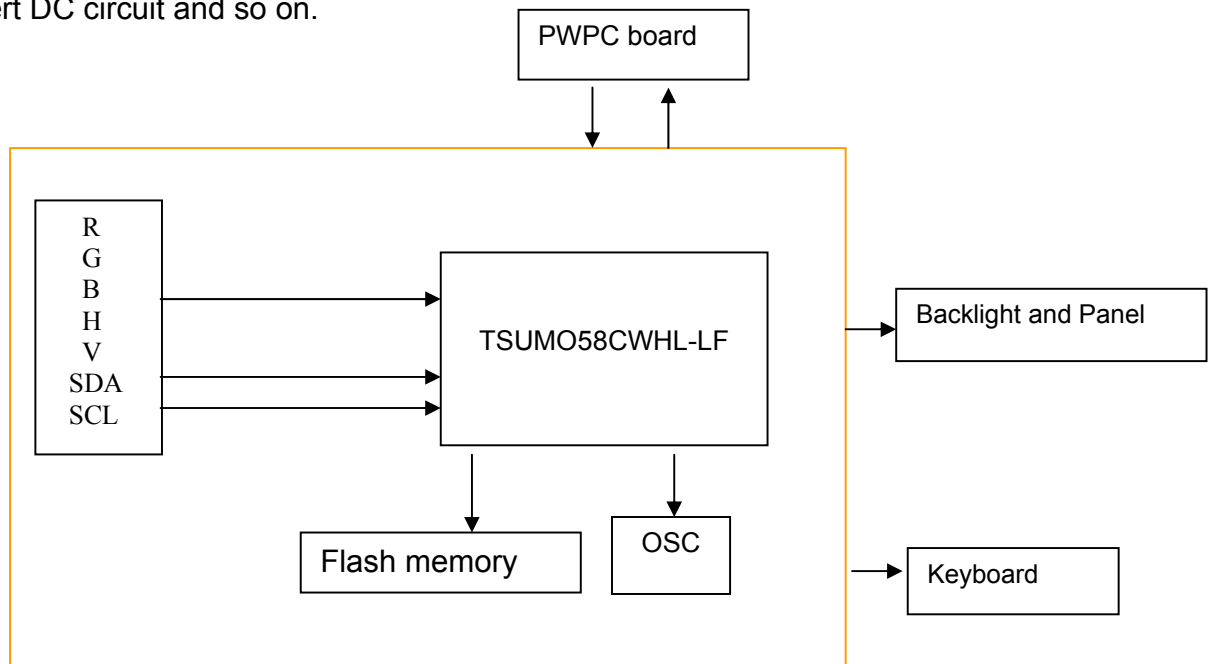
### 4.1 LCD MONITOR DESCRIPTION

The LCD MONITOR will contain a Main Board, an Power Board, Key Board which house the flat panel control logic, brightness control logic and DDC.



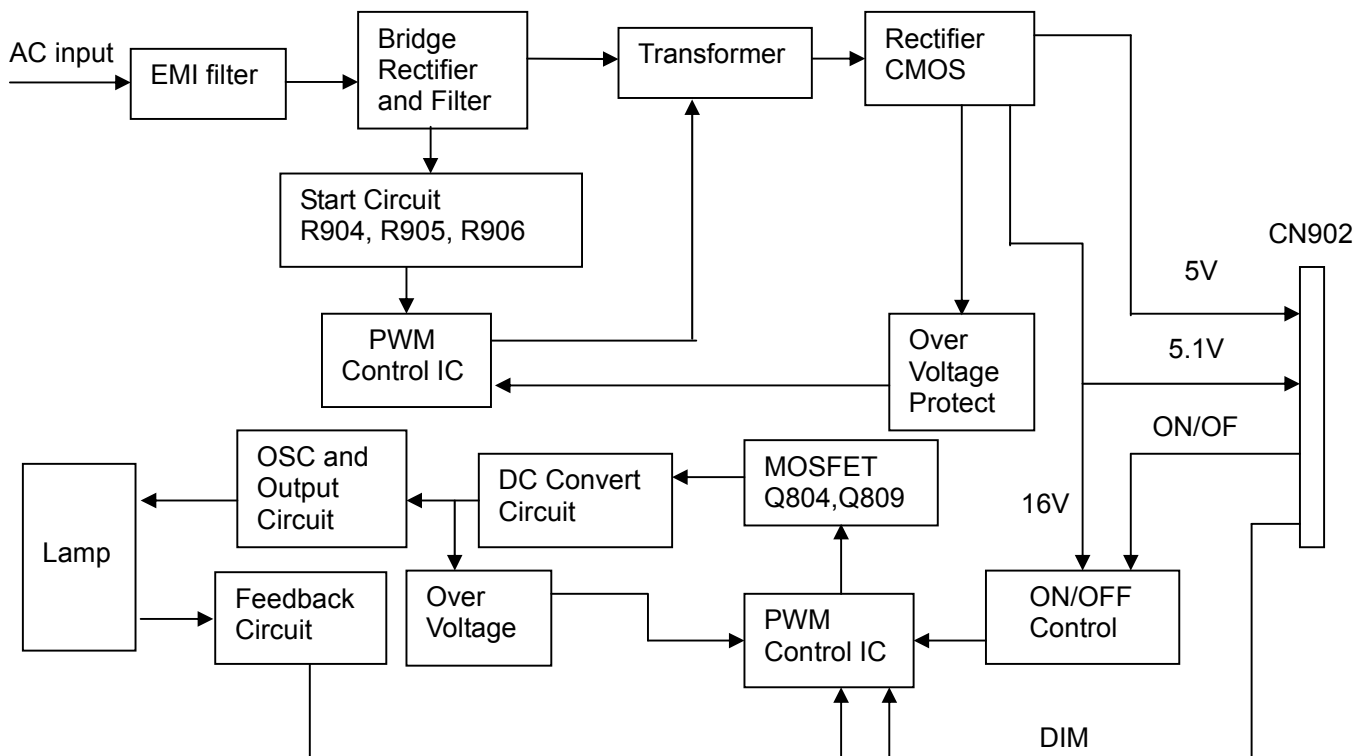
### 4.2 MAIN BOARD BLOCK FUNCTION DESCRIPTION

The main board contains panel control logic, brightness control logic, DDC and DC convert DC circuit and so on.



### 4.3 PWPC BOARD BLOCK FUNCTION DESCRIPTION

PWPC board combines to adapter and inverter, Adapter which commonly consists of bridge rectifier and filter, start circuit, PWM control circuit, protection circuits and convert to 16V, 5V, 5.1V DC voltage by input 90V-240V AC voltage that provide power supply for each chips in the main board and inverter. Inverter is DC TO AC circuit. It changes the 16v DC of power supply to about 600-800v AC that drives the backlight. It mostly consists of starting circuit, PWM controller, DC changing circuit, LC surging circuit, output circuit and protection circuit etc.

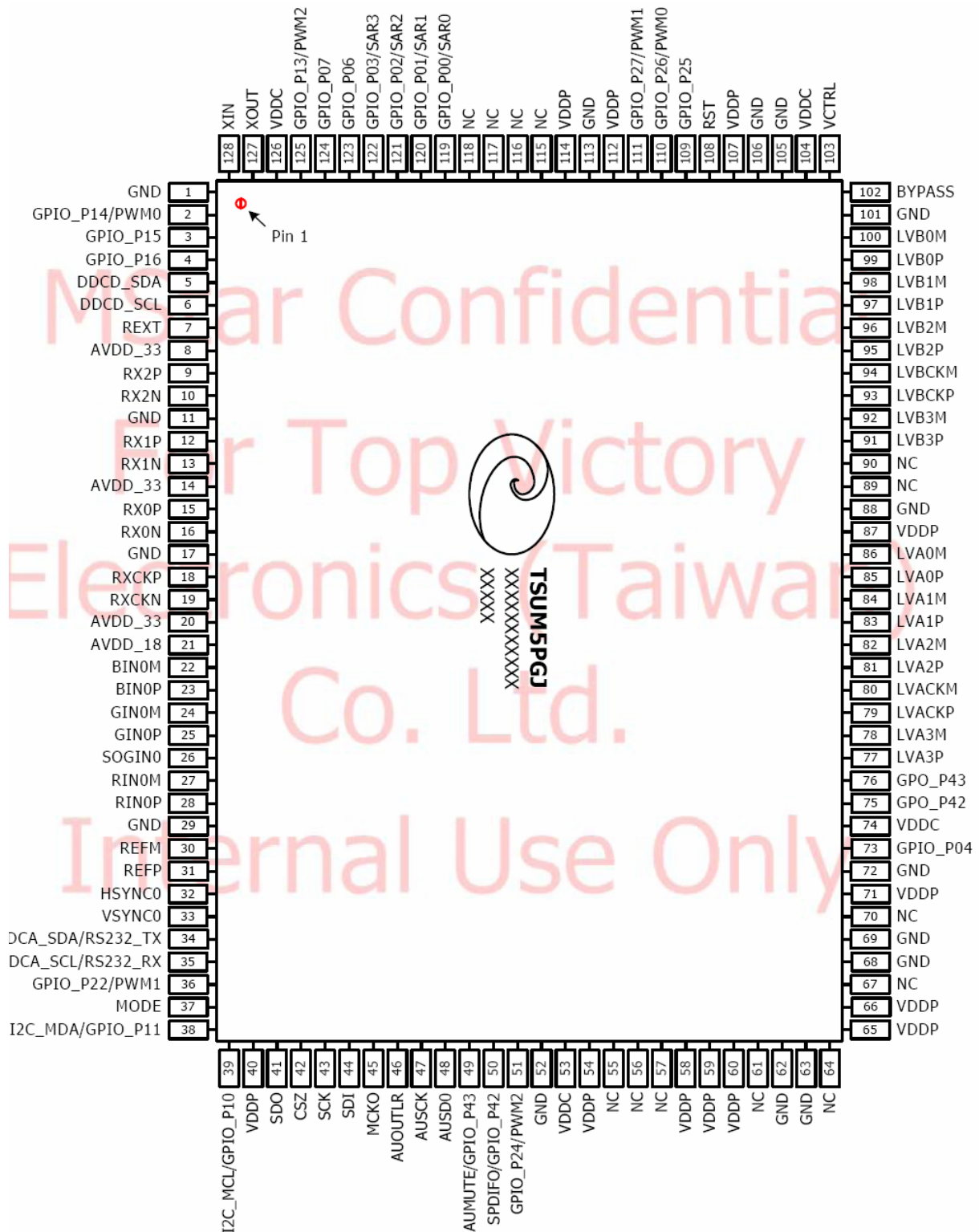


#### 4.4 INTRODUCTION OF IC

**TSUMO58CWHL-LF(U401):** integrate ADC, OSD, SCALER, MCU, LVDS, convert analog RGB into digital and room and shrink scaling output to LCD panel.

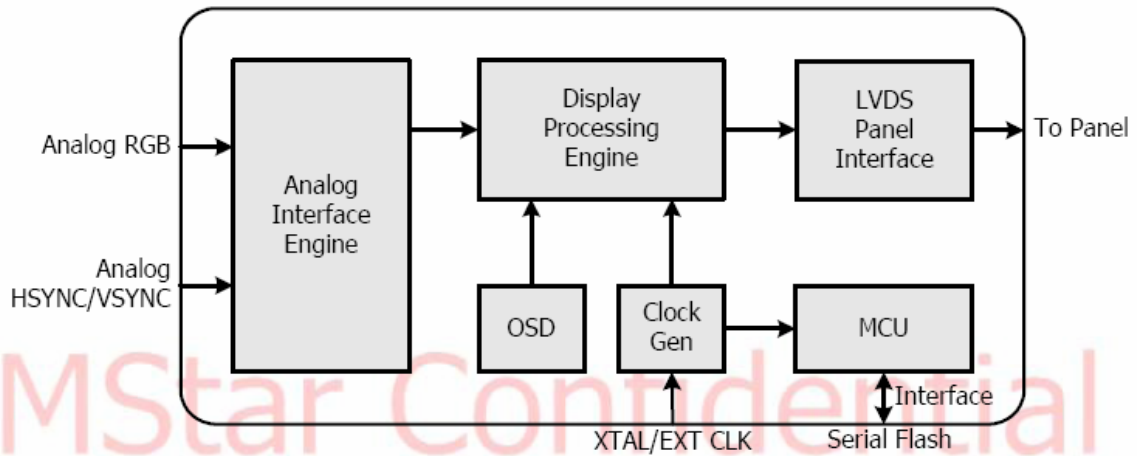
##### PIN Function:

Pin	Symbol	Description
41	SDO	SPI flash serial data output
42	CSZ	SPI flash chip select
43	SCK	SPI flash serial select
44	SDI	SPI flash serial data input
34	DDCA_SDA/RS232_TX	DDC Data for analog interface/ UART Ttransmitter / General Purpose Input/Output; 4mA driving strength
35	DDCA_SCL/RS232_RX	DDC Clock for analog interface/ UART Receiver / General Purpose Input/Output; 4mA driving strength
5	DDCD_SDA	DDC Data and HDCP Slave Serial Port Data for DVI/HDMI Interface; 4mA driving strength
6	DDCD_SCL	DDC Clock and HDCP Slave Serial Port Data for DVI/HDMI Interface
102	BYPASS	For External Bypass Capacitor
108	RST	Chip reset; High reset
103	VCTRL	Regulator control
32	HSYNCO	Analog HSYNC input
33	VSYNCO	Analog VSYNC input
31	REFP	Internal ADC top de-coupling pin
30	REFM	Internal ADC bottom de-coupling pin
7	REXT	External resistor 390 ohm to AVDD_33
37	MODE	Chip Configuration Input; 10K ohm pull-low for normal operation
128	XIN	Xin; Crystal Oscillator Input
127	XOUT	Xout; Crystal Oscillator Output
8,12,20	AVDD_33	ADC Analog Power 3.3V
21	AVDD_18	ADC Analog Power 1.8V
40,54,58-60,65,66,71,87,107 112,114	VDDP	Digital Output Power 3.3V
53,74,104,126	VDDC	Digital Core Power 1.8V
1,11,17,29,52,62,63,68,69,72, 88,101,105,106,113	GND	Ground





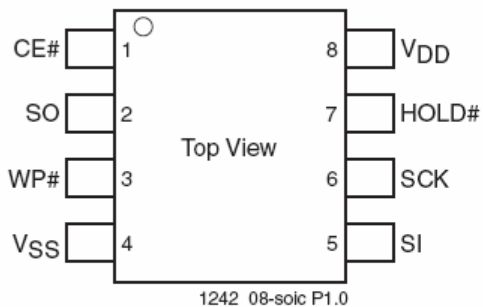
## BLOCK DIAGRAM



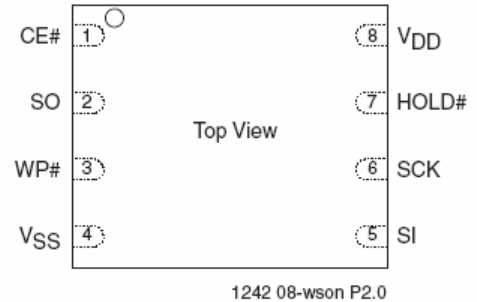
**AP1117D33LA(701):** DC power convert, convert to 3.3v.

**SST25LF020A-33-4C-SAE(U402):** SST's serial flash family features a four-wire, SPI-com-patible interface that allows for a low pin-count package occupying less board space and ultimately lowering total system costs. The SST25LF020A/040A devices significantly improve performance, while lowering power consumption. The total energy consumed is a function of the applied voltage, current, and time of application. The SST25LF020A/040A devices operate with a single 3.0-3.6V power supply. The SST25LF020A devices are offered in an 8-lead SOIC 150 mil body width (SA) package.

### Pin Diagram:



**8-LEAD SOIC**



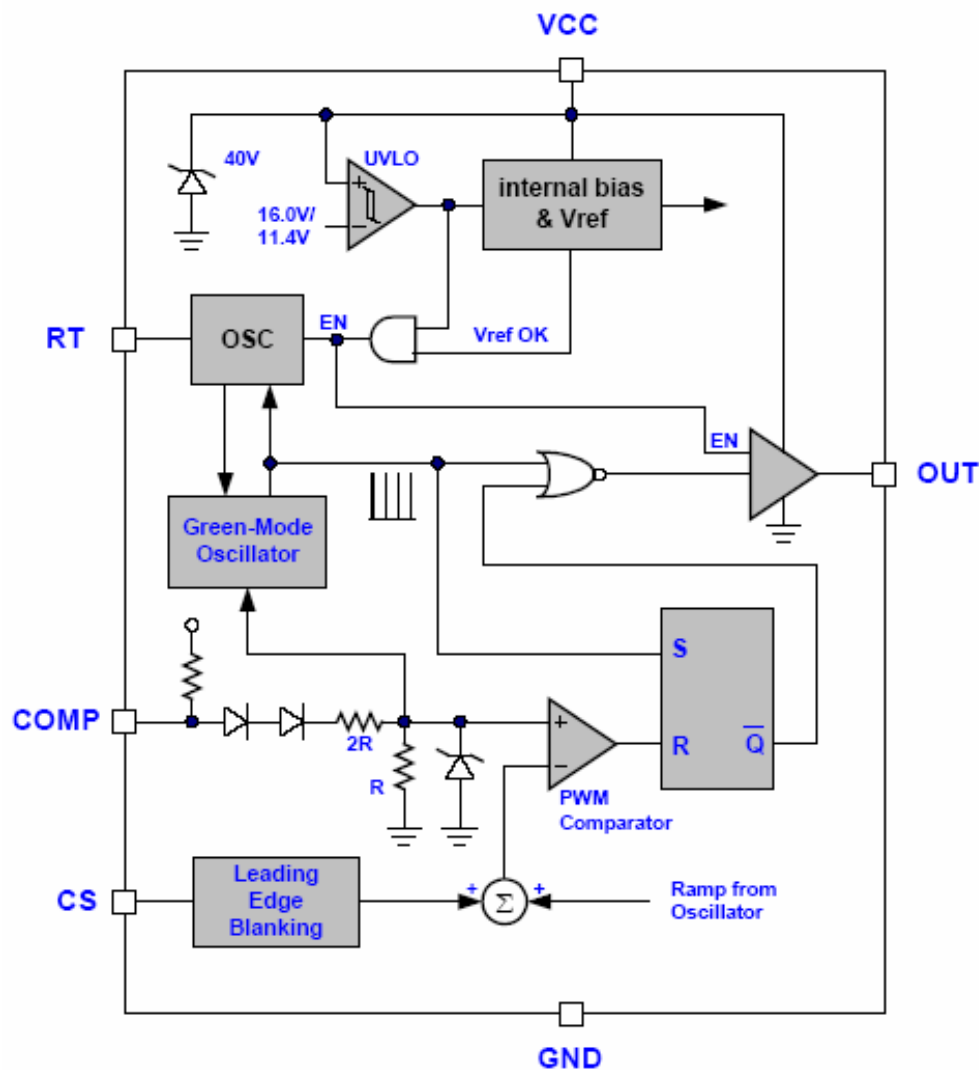
**8-CONTACT WSON**

### PIN Descriptions:



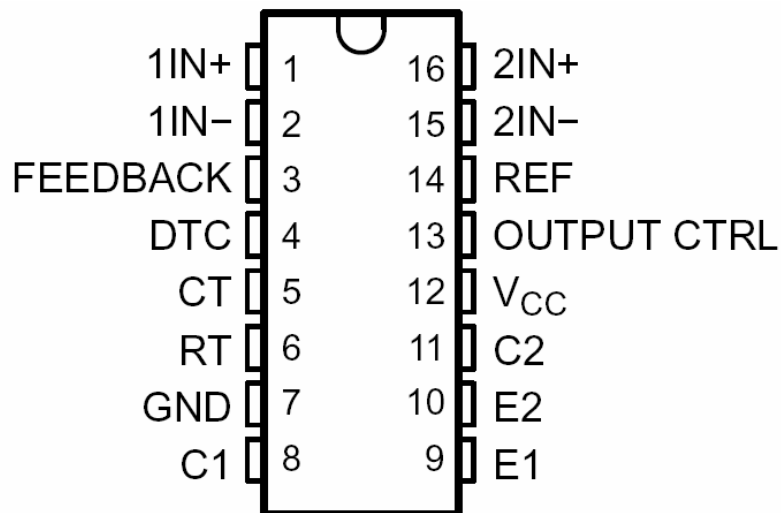
**LD7552DPS (IC901):** PWM control, high-voltage startup current. The circuit unit has functions such as over-current protection, over-voltage protection, output short-circuit protection and etc. The function of each pin and the inside circuit diagram are as follows:

Pin	Name	Function
1	GND	Ground
2	COMP	Voltage feedback pin (same as the COMP pin in UC384X), By connecting a photo-coupler to close the control loop and achieve the regulation
3	VCC	Supply voltage pin
4	RT	This pin is to program the switching frequency. By connecting a resistor to ground to set the switching frequency.
6	NC	Unconnected pin
7	VCC	Supply voltage pin
8	OUT	Gate drive output to drive the external MOSFET

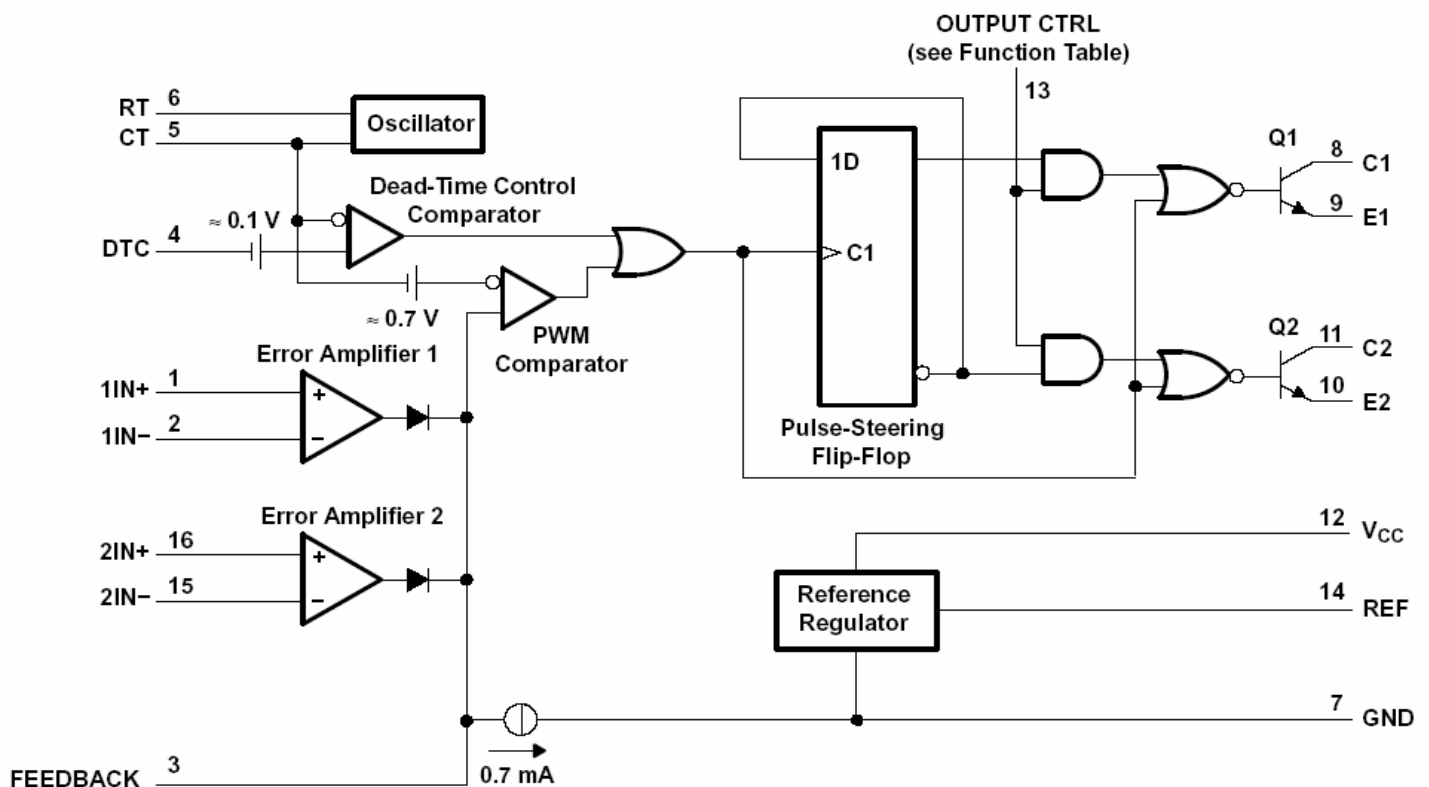


**TL494IDR(IC801):** The TL494 incorporates all the functions required in the construction of a pulse-width-modulation (PWM) control circuit on a single chip. Designed primarily for power-supply control, this device offers the flexibility to tailor the power-supply control circuitry to a specific application.

### PIN Descriptions:



### FUNCTIONAL BLOCK DIAGRAM



## 5. Adjustment Procedure

### 5.1 ADJUSTMENT CONDITIONS AND PRECAUTIONS

1. Approximately 30 minutes should be allowed for warm up before proceeding.
2. Adjustments should be undertaken only on those necessary elements since most of them have been carefully preset at the factory.
3. ESD protection is needed before adjustment.

### 5.2 MAIN ADJUSTMENTS

NO.	FUNCTIONS	DESIGNATION
1.	White Balance	Function Key
2.	Geometry	Function Key

### 5.3 ALIGNMENT PROCEDURES

**Approximately 30 minutes should be allowed for warm up before proceeding White-Balance adjustment.**

#### 1. Adjust of White Balance

1.) How to do the CA-210 MEM .Channel setting

A、Reference to CA-210 user guide

B、Use “**MODE**” key to modify **x**、**y**、**Lv** value and use “**MEMORY CH**” key to modify the TEXT description Following is the procedure to do white-balance adjust

2.) Setting the color temp. You want

A、MEM.CHANNEL1 ( 9300 color):

9300 color temp. parameter is  $x = 0.283 \pm 0.003$ ;  $y = 0.298 \pm 0.003$ ;  
 $L_v \geq 175 \text{ cd/m}^2$ .

B、MEM.CHANNEL 1 ( 7500 color):

7500 color temp. parameter is  $x = 0.299 \pm 0.003$ ;  $y = 0.315 \pm 0.003$ ;  
 $L_v \geq 188 \text{ cd/m}^2$ .

C、MEM.CHANNEL1 ( 6500 color):

6500 color temp. parameter is  $x = 0.313 \pm 0.003$ ;  $y = 0.329 \pm 0.003$ ;  
 $L_v \geq 213 \text{ cd/m}^2$ .

D、MEM.CHANNEL 1 ( 5000 color):

5400 color temp. parameter is  $x = 0.346 \pm 0.003$ ;  $y = 0.359 \pm 0.003$ ;  
 $L_v \geq 175 \text{ cd/m}^2$ .

E、MEM.CHANNEL1 ( SRGB color):

SRGB color temp. parameter is  $x=0.313 \pm 0.003$ ;  $y=0.329 \pm 0.003$ ;  $L_v \geq 85 \text{ cd/m}^2$ .

3.) Into factory mode of VX2262wm/wmp:

First Power off, then press Switch 1 button along with press Power button will activate the factory mode, then MCU will do AUTO LEVEL automatically. Meanwhile press MENU the OSD screen will located at **LEFT TOP OF PANEL**.

4.) Bias adjustment :

Set the **Contrast** to 70, Adjust the **Brightness** to 100.

5.) Gain adjustment :

Move cursor to “-F-” and press MENU key

A、Adjust 9300 color-temperature

- (1)、Switch the CA-210 to **x、y、Lv -Mode** (with press “MODE” button )
- (2)、Switch the MEM .channel to Channel 1 ( with up or down arrow on CA-210 )
- (3)、The LCD-indicator on CA-210 will show  $x=0.283\pm0.003$ ,  $y=0.298\pm0.003$ ,  $Lv\geq175\text{cd/m}^2$
- (4)、Adjust the R G B of color3 on factory window until CA210 indicator reached  $x=0.283\pm0.003$ ,  $y=0.298\pm0.003$ ,  $Lv\geq175\text{cd/m}^2$

B、Adjust 7500 color-temperature

- (1)、Switch the CA-210 to **x、y、Lv -Mode** (with press “MODE” button )
- (2)、Switch the MEM .channel to Channel 1( with up or down arrow on CA-210 )
- (3)、The LCD-indicator on CA-210 will show  $x=0.299\pm0.003$ ,  $y=0.315\pm0.003$ ,  $Lv\geq188\text{cd/m}^2$
- (4)、Adjust the R G B of color2 on factory window until CA210 indicator reached  $x = 0.299\pm0.003$ ;  $y = 0.315\pm0.003$ ;  $Lv\geq188\text{ cd/m}^2$

C、Adjust 6500 color-temperature

- (1)、Switch the CA-210 to **x、y、Lv -Mode** (with press “MODE” button )
- (2)、Switch the MEM .channel to Channel 1 ( with up or down arrow on CA-210 )
- (3)、The LCD-indicator on CA-210 will show  $x=0.313\pm0.003$ ,  $y=0.329\pm0.003$ ,  $Lv\geq213\text{cd/m}^2$
- (4) Adjust the R G B of color3 on factory window until CA210 indicator reached  $x=0.313\pm0.003$ ,  $y=0.329\pm0.003$ ,  $Lv\geq213\text{ cd/m}^2$

D、Adjust 5000 color-temperature

- (1)、Switch the CA-210 to **x、y、Lv -Mode** (with press “MODE” button )
- (2)、Switch the MEM .channel to Channel 1( with up or down arrow on CA-210 )
- (3)、The LCD-indicator on CA-210 will show  $x=0.346\pm0.003$ ,  $y=0.359\pm0.003$ ,  $Lv\geq175\text{ cd/m}^2$
- (4)、Adjust the R G B of color3 on factory window until CA210 indicator reached  $x = 0.346\pm0.003$ ;  $y = 0.359\pm0.003$ ;  $Lv\geq175\text{ cd/m}^2$

E、Adjust SRGB color-temperature

- (1)、Switch the CA-210 to **x、y、Lv -Mode** (with press “MODE” button )
- (2)、Switch the MEM .channel to Channel 1 ( with up or down arrow on CA-210 )
- (3)、The LCD-indicator on CA-210 will show  $x=0.313\pm0.003$ ,  $y=0.329\pm0.003$ ,  $Lv\geq85\text{ cd/m}^2$
- (4)、Adjust the R G B of color3 on factory window until CA210 indicator reached  $x=0.313\pm0.003$ ,  $y=0.329\pm0.003$ ,  $Lv\geq85\text{ cd/m}^2$

F、Press reset key and Turn the Power-button “off to on” to quit from factory mode。



## 2. Geometry

- 1).Set cross-hatch pattern and preset timing as timing table listed.
- 2).Change to each mode in turn and wait for the monitor finish auto-alignment and save press before change to next mode.
- 3).Until all of modes are adjusted, exit OSD menu and press POWER OFF to exit factory mode.

## 5.4 Factory Defaults

Item	Defaults	Item	Defaults
Contrast	70%	OSD Time Out	15 Sec
Brightness	100%	OSD Background	On
Color Temperature	6500K	Volume	70%
Sharpness	50%	Treble	N/A
OSD H. Position	50%	Bass	N/A
OSD V. Position	50%	Input Priority	Auto Search
720x400 / 640x400	720x400	Dynamic Contrast	Off
Resolution Notice	On	Aspect Ratio	Full screen
		Response Time	Advanced

## 5.5 Function Test

- 1 Product: 22" LCD Monitor
- 2 Test Equipment: Color Video Signal & Pattern (or PC with SXGA resolution)
- 3 Test Condition: Before function test and alignment, each LCD Monitor should be warmed up for at least 30 minutes with the following conditions:
  - (a)In room temperature,
  - (b) With full-white screen, RGB, and Black
  - (c) With cycled display modes,  
640\*480 (H=43.27kHz, V=75Hz)  
800\*600 (H=53.7kHz, V=75Hz)  
1024\*768 (H=68.67kHz, V=60Hz)  
1280\*1024 (H=79.97kHz, V=60Hz)  
1440\*900 (H=55.9kHz, V=60Hz)  
1680 x 1050 (H=5.3kHz, V=60Hz)
- 4 Test Display Modes & Pattern

### Compatible Modes

Item	Timing	Analog
1	640 x 480 @ 60Hz, 31.5kHz	Yes
2	640 x 480 @ 75Hz, 31.5kHz	Yes
3	720 x 400 @ 70Hz, 31.5kHz	Yes
4	800 x 600 @ 56Hz, 35.1kHz	Yes
5	800 x 600 @ 60Hz, 37.9kHz	Yes
6	800 x 600 @ 72Hz, 48.1kHz	Yes
7	800 x 600 @ 75Hz, 46.9kHz	Yes
8	1024 x 768 @ 60Hz, 48.4kHz	Yes
9	1024 x 768 @ 70Hz, 56.5kHz	Yes
10	1024 x 768 @ 72Hz, 58.1kHz	Yes

11	1024 x 768 @ 75Hz, 60.0kHz	Yes
12	1280 x 1024 @ 60Hz, 48.4kHz	Yes
13	1280 x 1024 @ 75Hz, 80kHz	Yes
14	1440 x 900 @ 60Hz, 55.9kHz	Yes
15	1440 x 900 @ 75Hz, 70.6kHz	Yes
16	1680 x 1050 @ 60Hz, 65.3kHz	Yes

### Function Test Display Pattern

Item	Test Content	Pattern	Specification	Remark
1	Frequency & Tracking	Fine Line Moire	Eliminate visual wavy noise.	Figure 1
2	Contrast/Brightness	16 Gray Scale	16 gray levels sh should be distinguishable.	Figure 2
3	Boundary	Horizontal & Vertical Thickness	Horizontal and Vertical position of video should be adjustable to be within the screen frame.	Figure 3
4	RGB Color Performance	RGB Color Intensities	Contrast of each R, G, B, color should be normal.	Figure 4,5,6
5	Screen Uniformity & Flicker	Full White	Should be compliant with the spec.	Figure 7
6	Dead Pixel/Line	White Screen & Dark Screen	The numbers of dead pixels should be compliant with the spec.	Figure 7,8
7	White Balance	White & Black Pattern	The screen must have the pure white and black pattern, no other color.	Figure 9



Fine Line Moire Pattern (Figure1)



Gray Scale Pattern (Figure2)



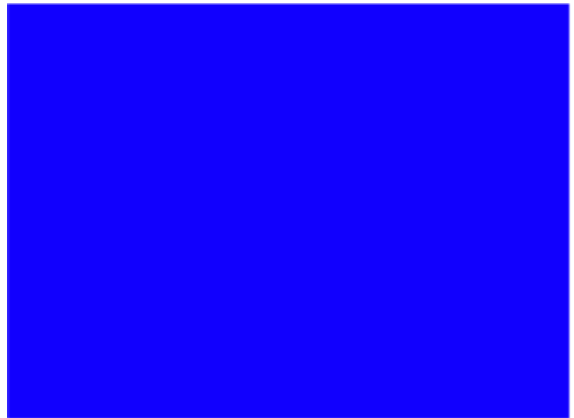
Horizontal & Vertical Thickness Pattern  
(Figure 3)



R. Color Pattern (Figure 4)



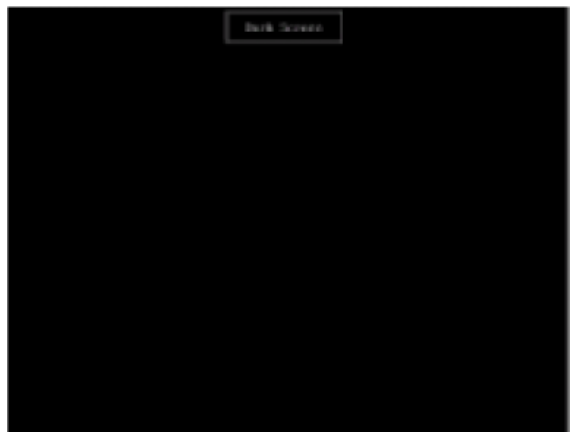
G. Color Pattern (Figure 5)



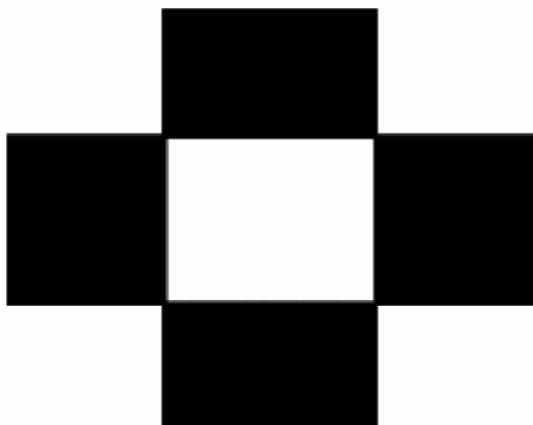
B. Color Pattern (Figure 6)



Full White Pattern (Figure 7)



Dark Screen Pattern (Figure 8)



Black-White Pattern (Figure 9)

### 4.3 Function Test and Alignment Procedure

#### **All Modes Reset**

You should do “All Mode Reset” (Refer to Chapter III-3. Hot Keys for Function Controls) first. This action will allow you to erase all end-user’s settings and restore the factory defaults.

#### **Auto Image Adjust**

Please select and enter “Auto Image Adjust” function on Main Menu to see if it is workable. The “Auto Image Adjust” function is aimed to offer a better screen quality by built-in ASIC. For optimum screen quality, the user has to adjust each function manually.

#### **Firmware**

Test Pattern: Burn In Mode (Refer to Chapter III-3. Hot Keys for Function Controls)

- Make sure the F/W is the latest version.

#### **DDC**

Test Pattern: EDID program

Make sure it can pass test program.

#### **Fine Tune and Sharpness**

Test Signal: 1680\*1050@60Hz

Test Pattern: Line Moire Pattern

Check and see if the image has noise and focus performs well. Eliminate visual line bar.

If not, readjust by the following steps:

(a) Select and enter “Fine Tune” function on “Manual Image Adjust” to adjust the image to eliminate visual wavy noise.

(b) Then, select and enter “Sharpness” function to adjust the clarity and focus of the screen image.

#### **Boundary**

Test Signal: 1680\*1050@60Hz

Test Pattern: Horizontal & Vertical Line Thickness Pattern

Check and see if the image boundary is within the screen frame.

If not, readjust by the following steps:

(a) Select and enter “Manual Image Adjust” function on OSD Main Menu.

(b) Then, select and enter “Horizontal Size” or “Horizontal/Vertical Position” function to adjust the video boundary to be full scanned and within screen frame.

**White Balance**

Test Signal: 1680\*1050@60Hz

Test Pattern: White and Black Pattern

1.5.8 R, G, B, Colors Contrast

Test Signal: 1680\*1050@60Hz

Test Pattern: R, G, B, Color Intensities Pattern and 16 Gray Scale Pattern

- Check and see if each color is normal and distinguishable.
- If not, please return the unit to repair area.

**Screen Uniformity and Flicker**

Test Signal: 1680\*1050@60Hz

Test Pattern: Full White Pattern

- Check and see if it is in normal condition.

1.5.10 Dead Pixel and Line

Test Signal: 1680\*1050@60Hz

Test Pattern: Dark and White Screen Pattern

- Check and see if there are dead pixels on LCD panel with shadow gauge and filter film.
- The total numbers and distance of dead pixels should be compliant with the spec.

**Mura**

Test Pattern: White, RGB, Black, & Grey

Test Tool: 10% ND Filter

- Check if the Mura can pass 10% ND Filter.

**Audio**

Test Signal: Voice signal (optional, depend on model)

Test Pattern: liberty

- Make sure there is audio output.
- Make sure that audio function (volume 80%) is working without noise and resonance.
- Make sure that the sound of right and left speakers are in balance.

**Check for Secondary Display Modes**

Test Signal:

Analog: 640\*480@60/75Hz;

720\*400@70Hz; 800\*600@56/60/72/75Hz;

1024\*768@60/70/72/75Hz; 1280\*1024@60/75Hz

1440\*900@60/75Hz

1680\*1050@60Hz

- Normally when the primary mode 1366\*768@60Hz is well adjusted and compliant with the specification, the secondary display modes will also be compliant with the spec. But we still have to check with the general test pattern to make sure every secondary is compliant with the specification.

**All Modes Reset**

After final QC step, we have to erase all saved changes again and restore the factory defaults. You should do "All Mode Reset" again.

**Power Off Monitor**

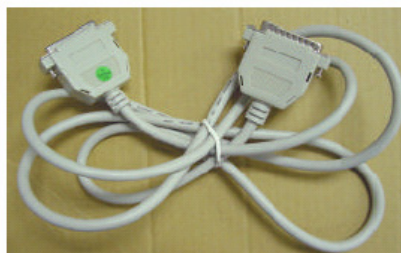
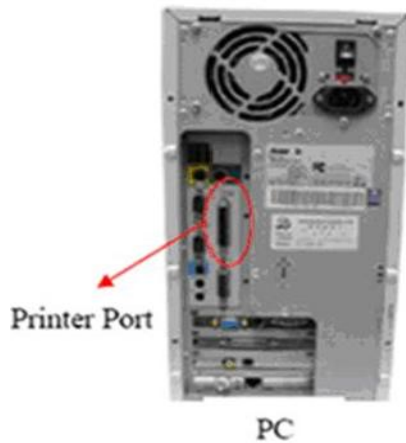
Turn off the monitor by pressing "Power" button.

## 5.6 Firmware Upgrade Procedure

When you receive the returned monitor, please check whether the firmware version is the latest. If not, please do the following procedures to upgrade it to the latest version.

### 1 Equipment Needed

- Monitor( TSUM Series )
- Fixture for Firmware Upgrade
- Power Adapter (P/N: 47.58201.001) \*1 for Fixture
- VGA Cable (P/N: 42.59901.003) \*1(Pin 4, 11 should be connected to GND)
- PC (Personal Computer)
- LPT Cable (P/N: 42.59906.001) \*1
- Firmware Upgrade Program
- One additional monitor for checking the program execution

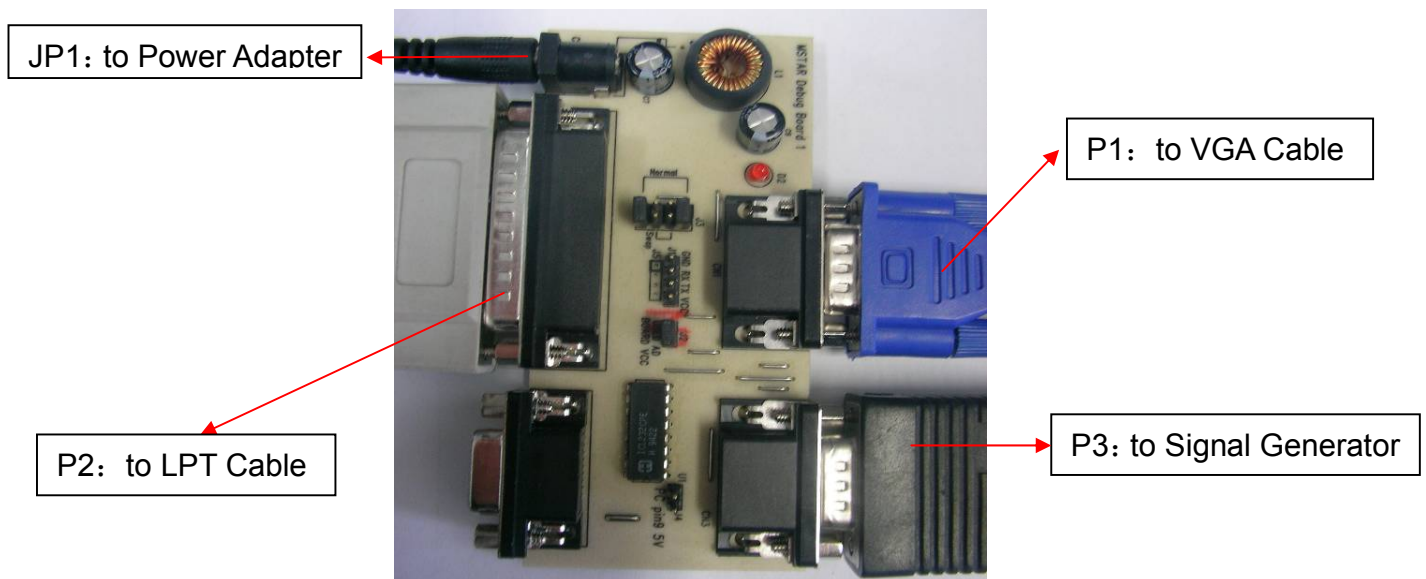


### 2 Setup Procedure

- 2.1 Connect P2 of Fixture with printer port of PC by LPT Cable.
- 2.2 Connect P1 of Fixture with Monitor(TSUM series) by VGA Cable.
- 2.3 Plug Power Adapter to Fixture.
- 2.4 Connect Power Cord to Monitor(TSUM series).
- 2.5 Connect P3 to the Signal Generator (eg.Chroma2326) for verifying it after the operation being completed.



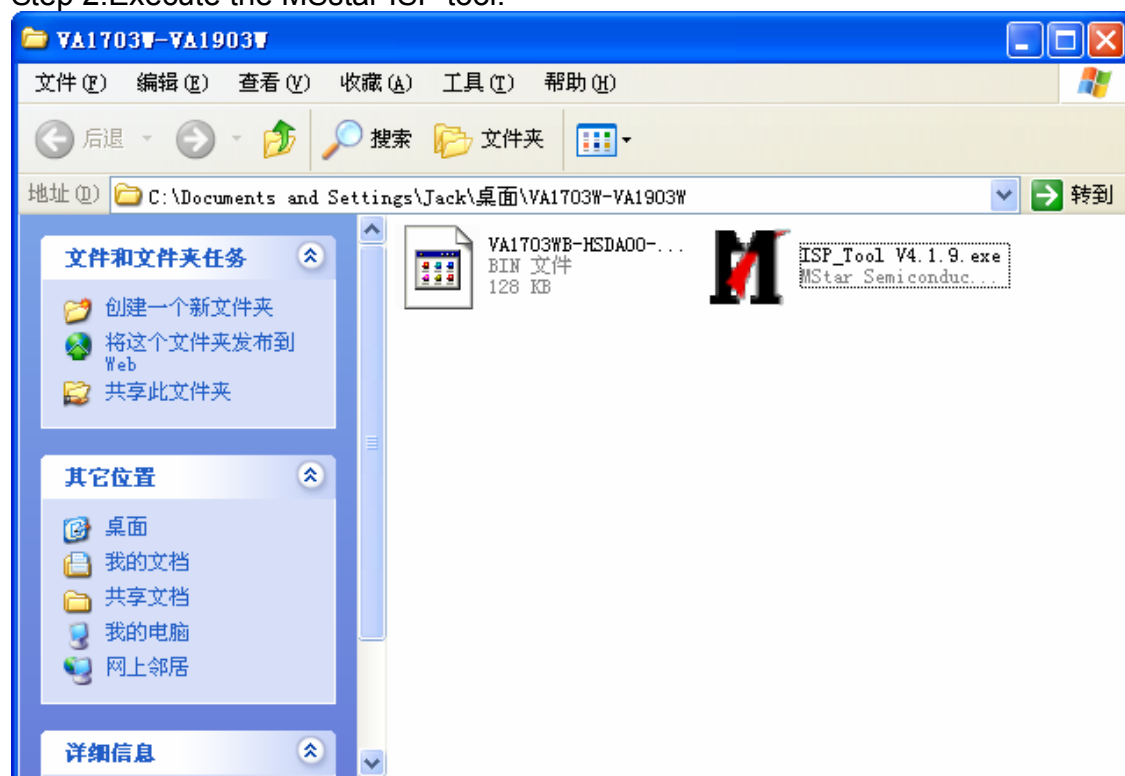
## 2.6 Connect PC to the additional monitor.



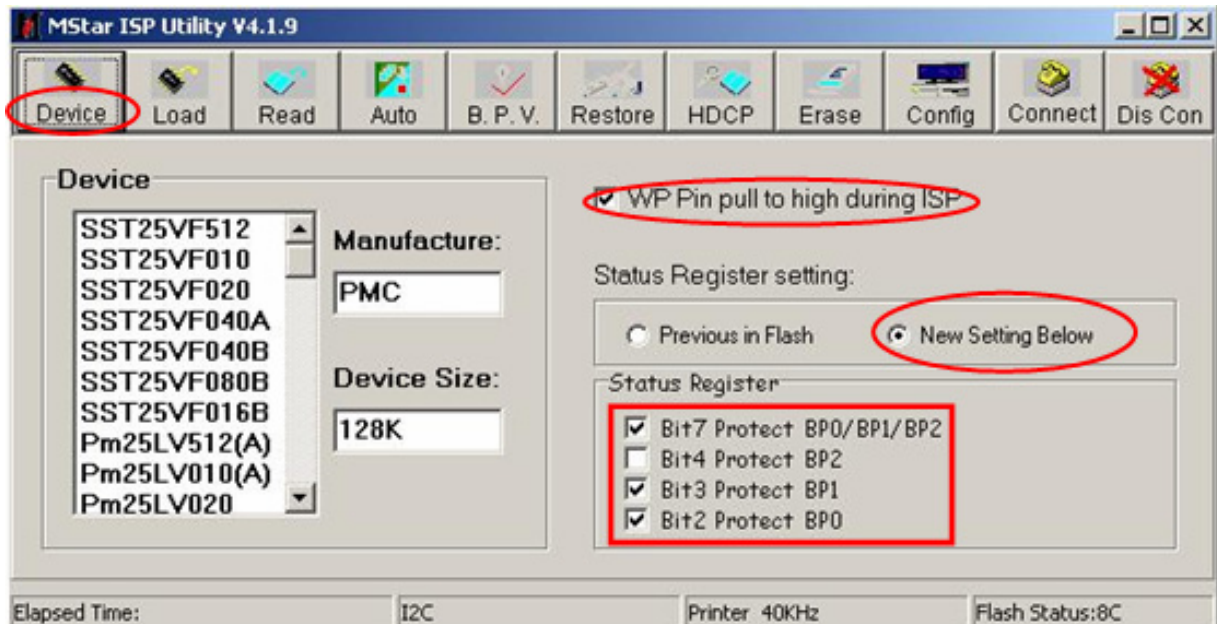
## 3 Firmware Upgrade Procedure

Step 1. Let Monitor(TSUM series) set to be connected with AC cable and VGA cable.

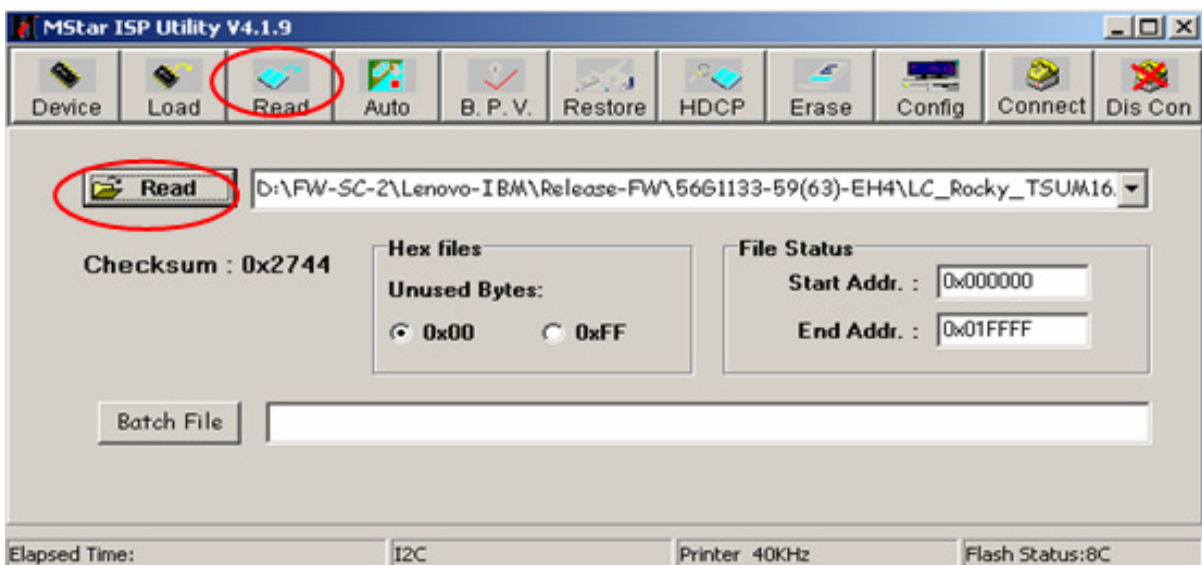
Step 2. Execute the MSstar ISP tool.



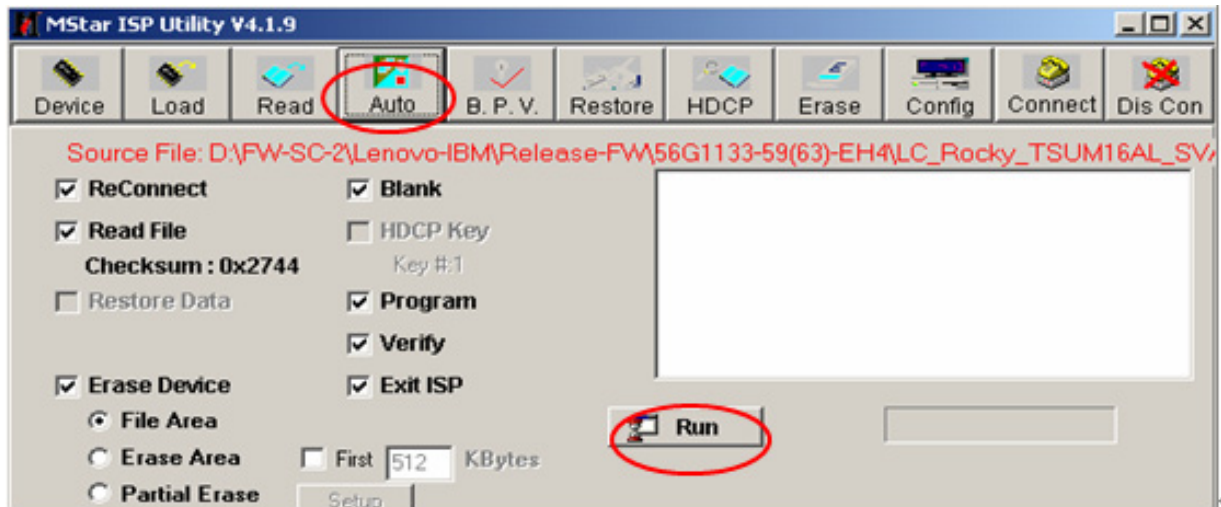
Step 3. Click "Device" button . Make sure that parameters relative to WP# is followed below.



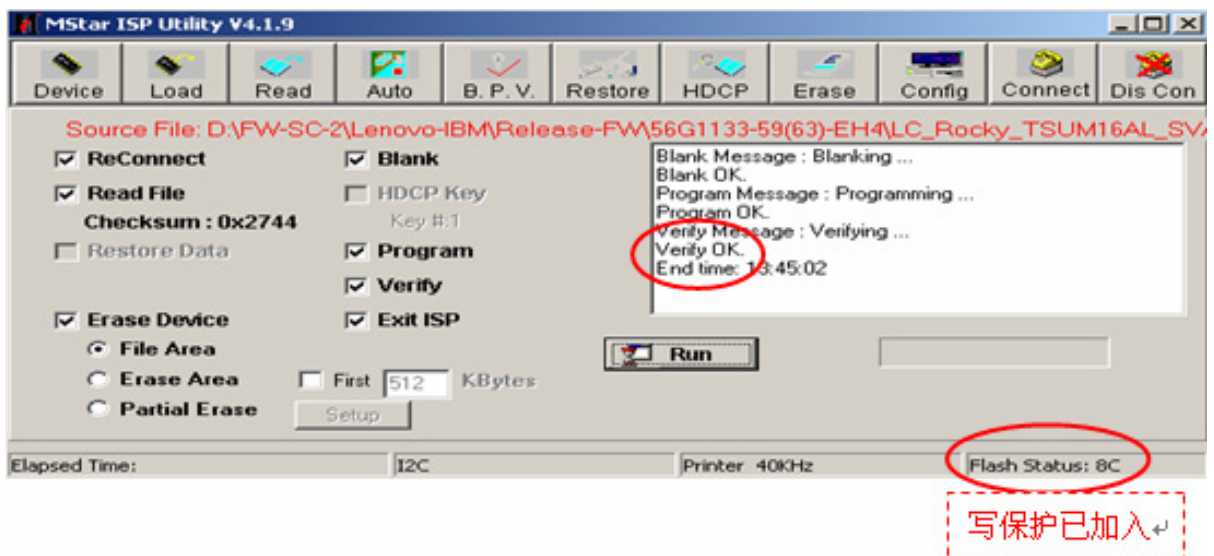
Step 4. Click “Read” button. Select the object bincode on your corresponding directory.



Step 5. Click “Auto” button. Be sure that function of Erase Device (File Area), Blank, Program and Verify is selected, then execute the flashing action by clicking the “Run” button.



Step 6. If the flashing F/W has been completed, "Verify Ok" message will be shown on the right TextBox and Flash Status will be "8C" in the right-bottom of window.



Step 7. Unplug and replug power cord of Monitor(TSUM series) set and then check the OSD operation and image on screen.

Step 8. At last, do "Memory Recall."

### 3.2 Setup Procedure

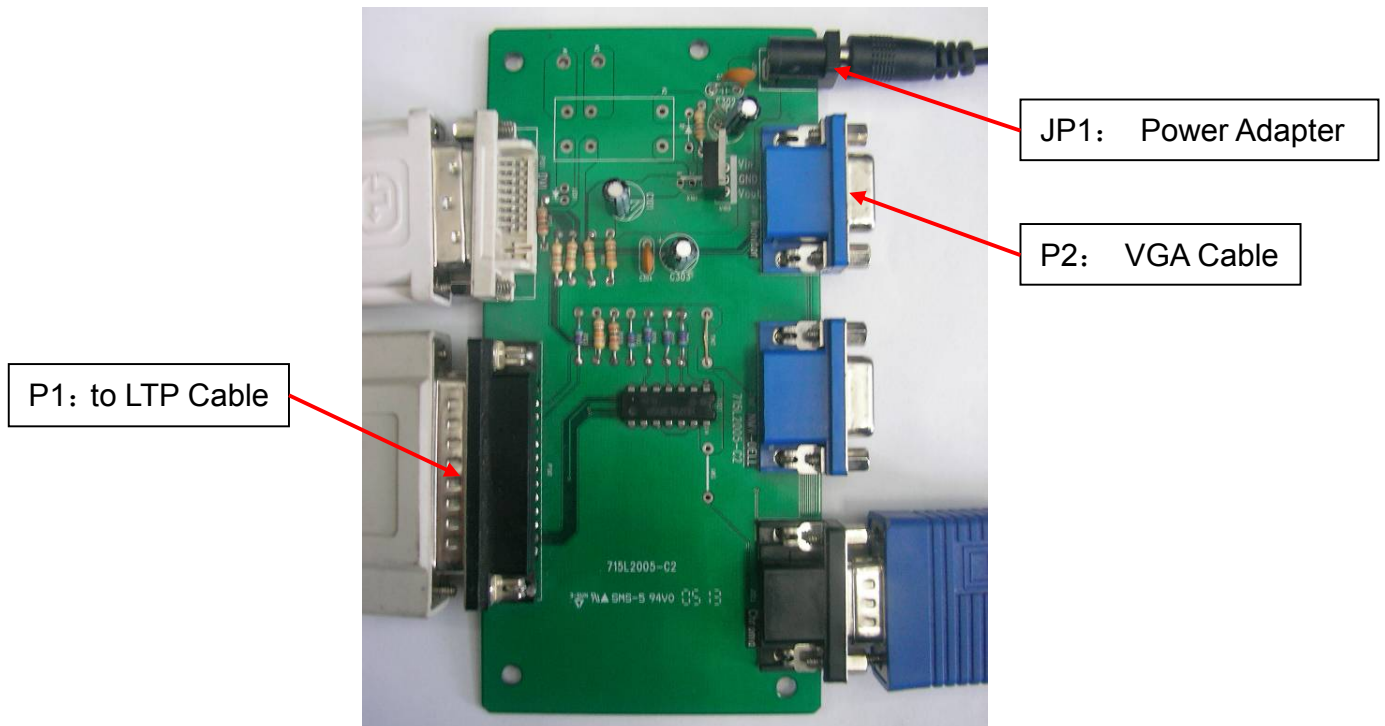
3.2.1 Connect P2 and monitor of Fixture with VGA ports of Monitor (TSUM Series) by VGA Cable.

3.2.2 Connect P1 of Fixture with Printer port of PC by LPT Cable.

3.2.3 Plug Power Adapter to Fixture.

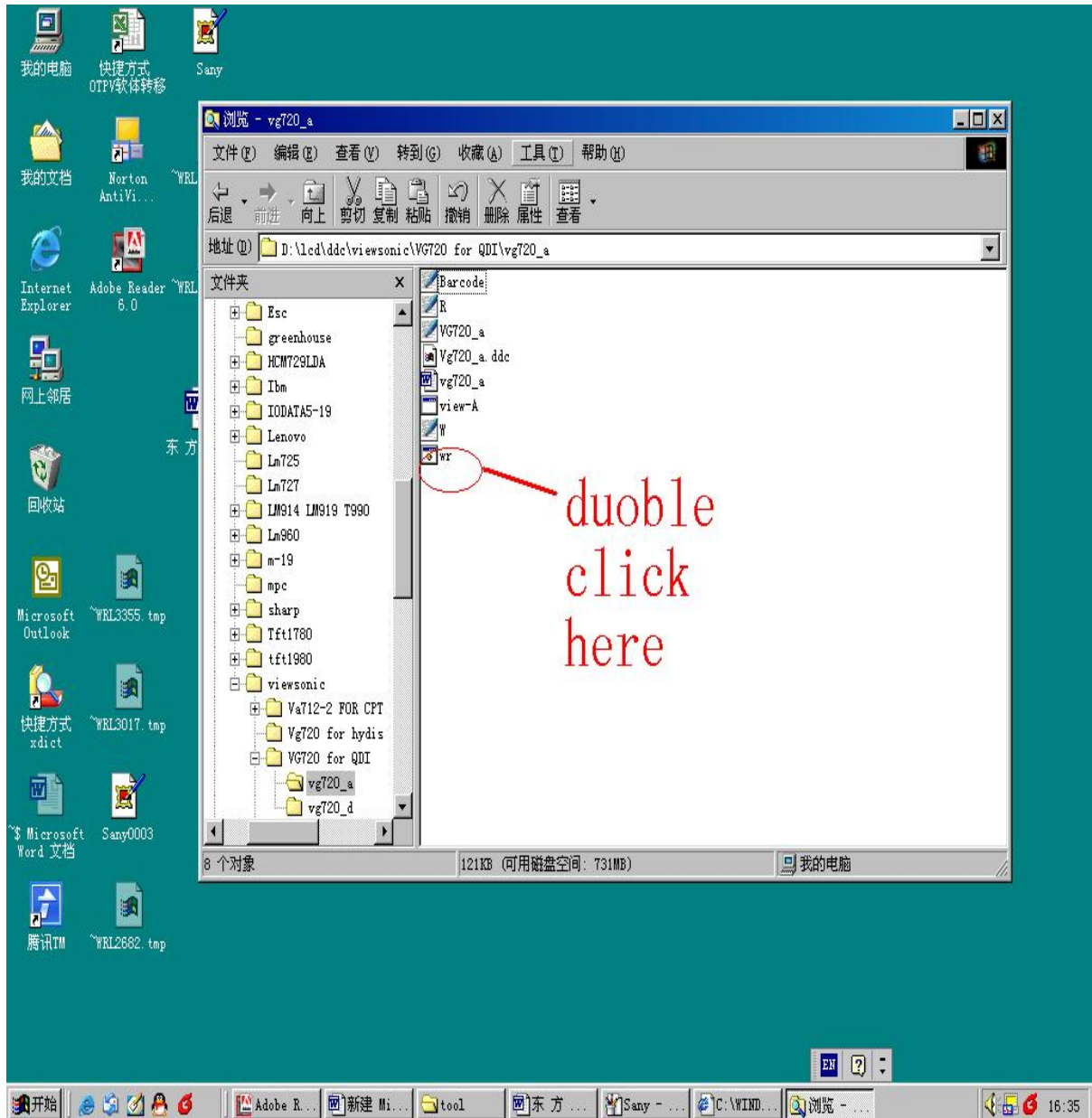
3.2.4 Connect Power Cord to Monitor (TSUM Series).

3.2.5 Connect PC to the additional monitor.



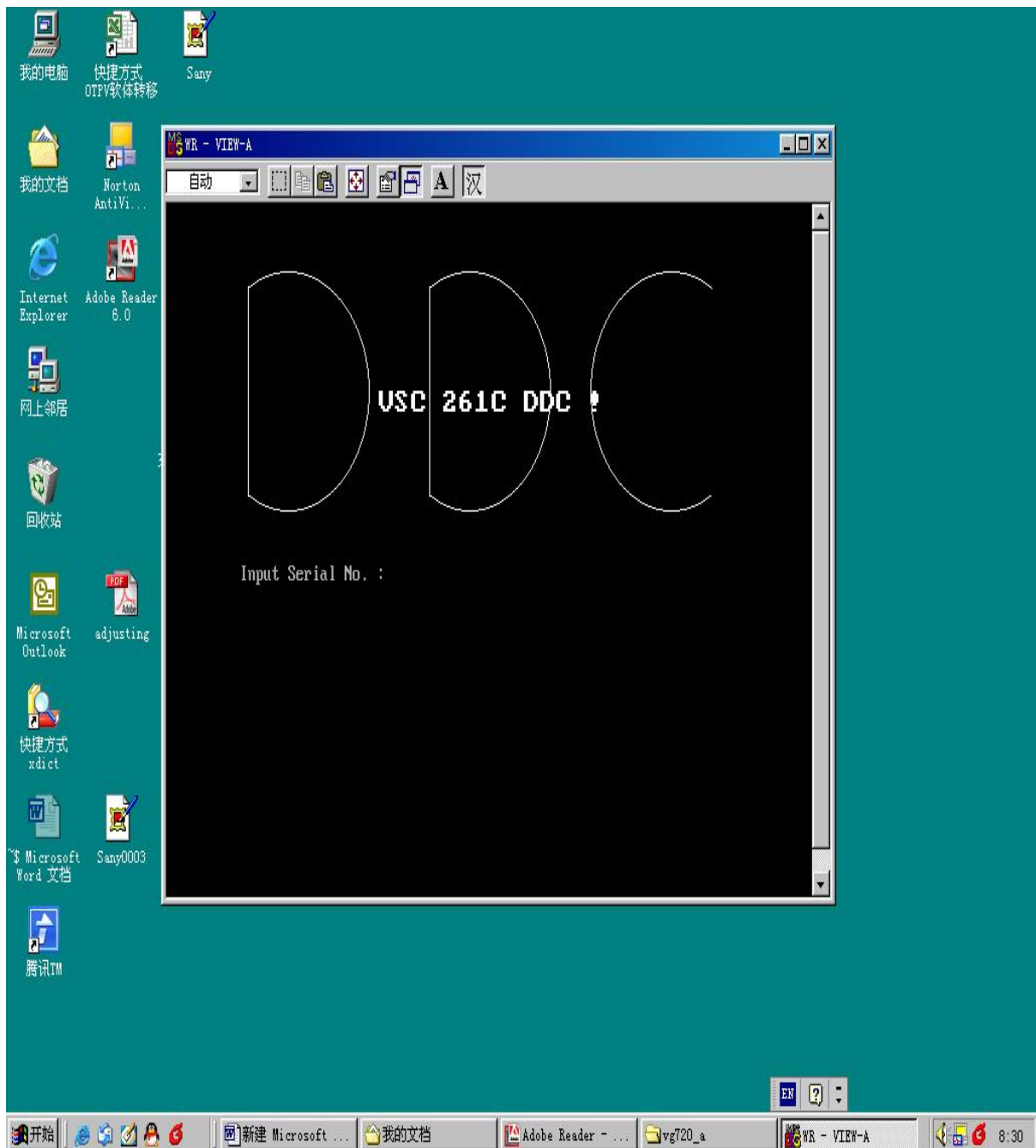
### 3.3 DDC Key In Procedure

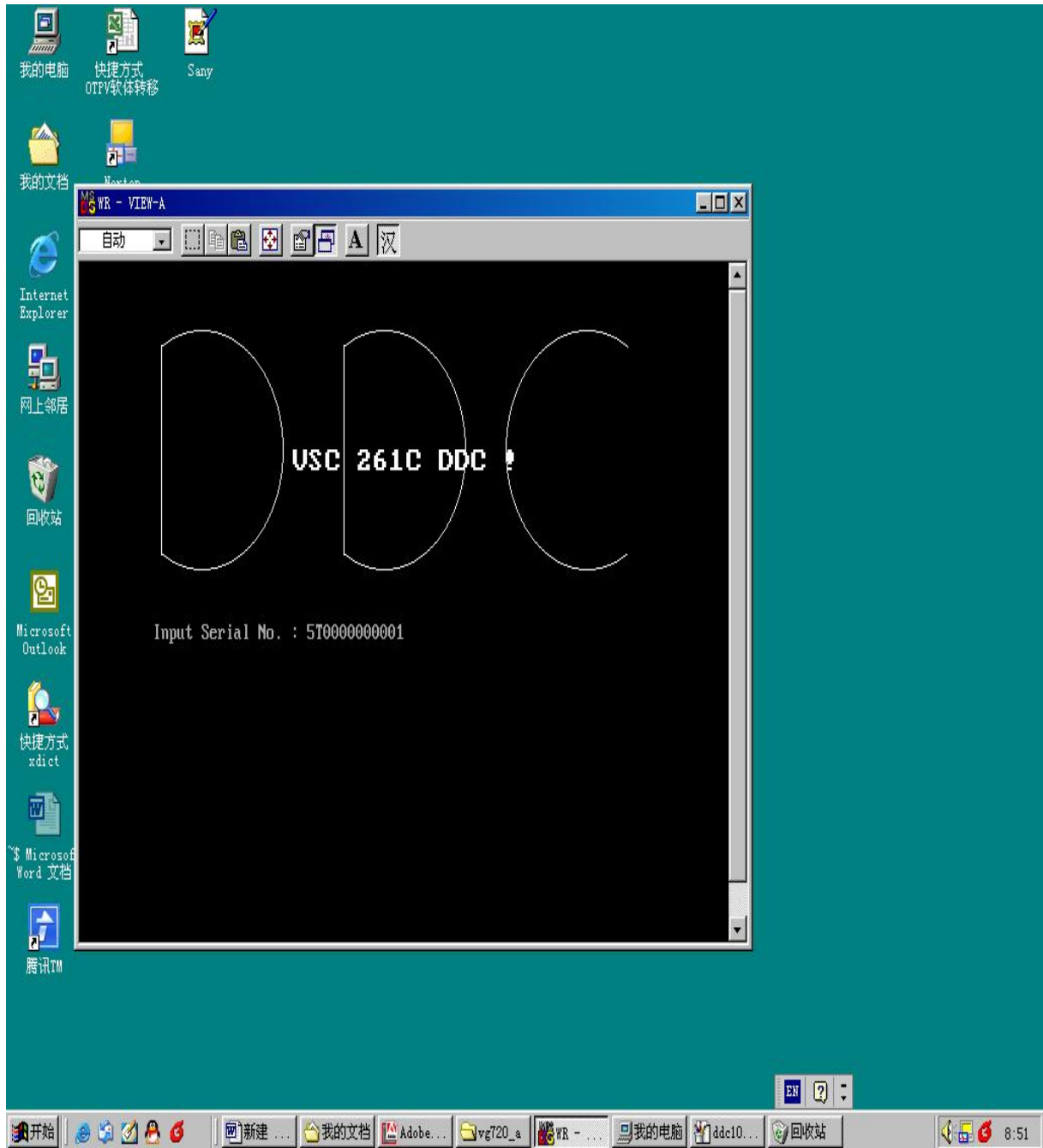
Sep1. Select and execute DDC Key In program



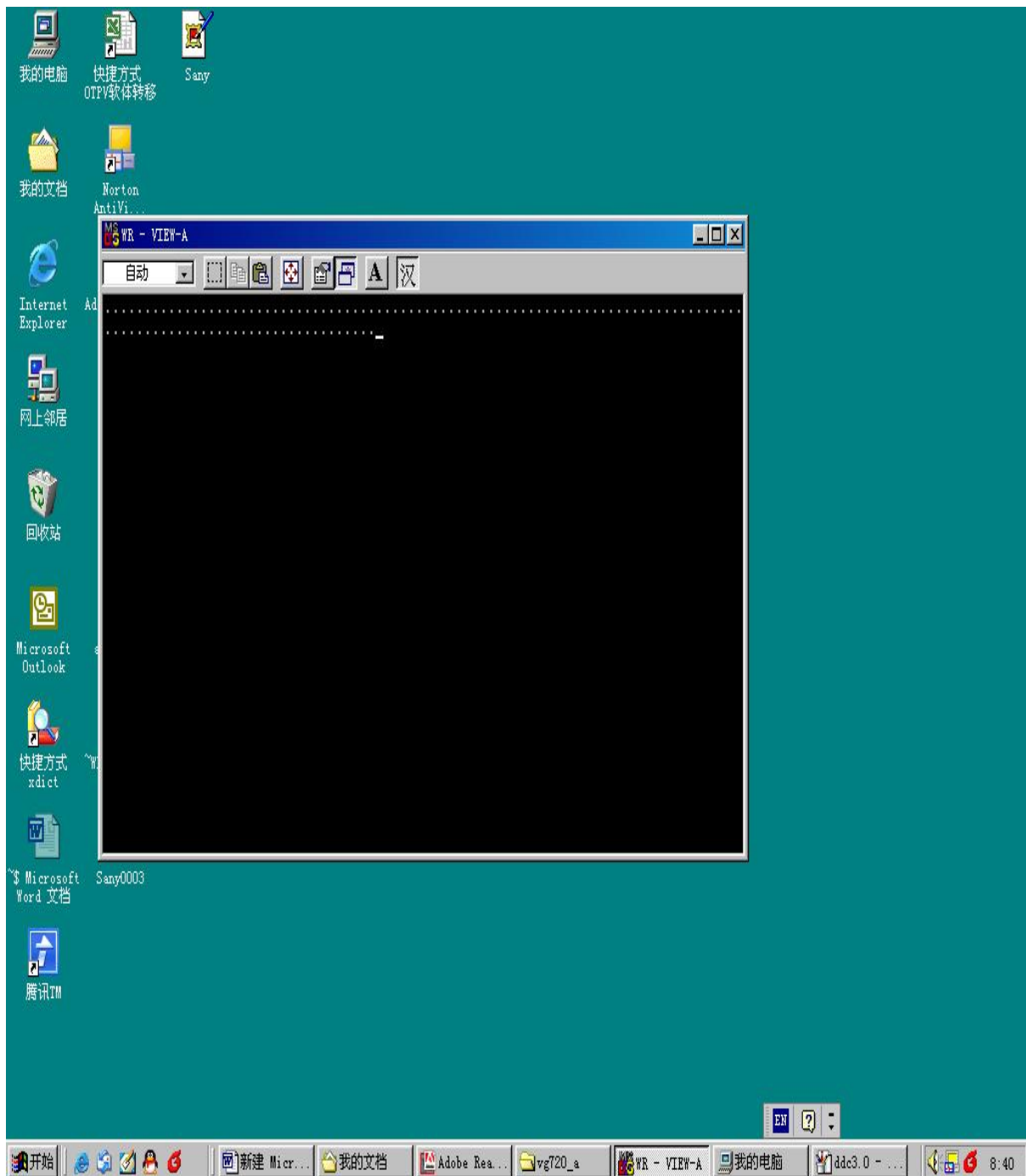


Sep2:Inpute the S/N and execute “Enter”



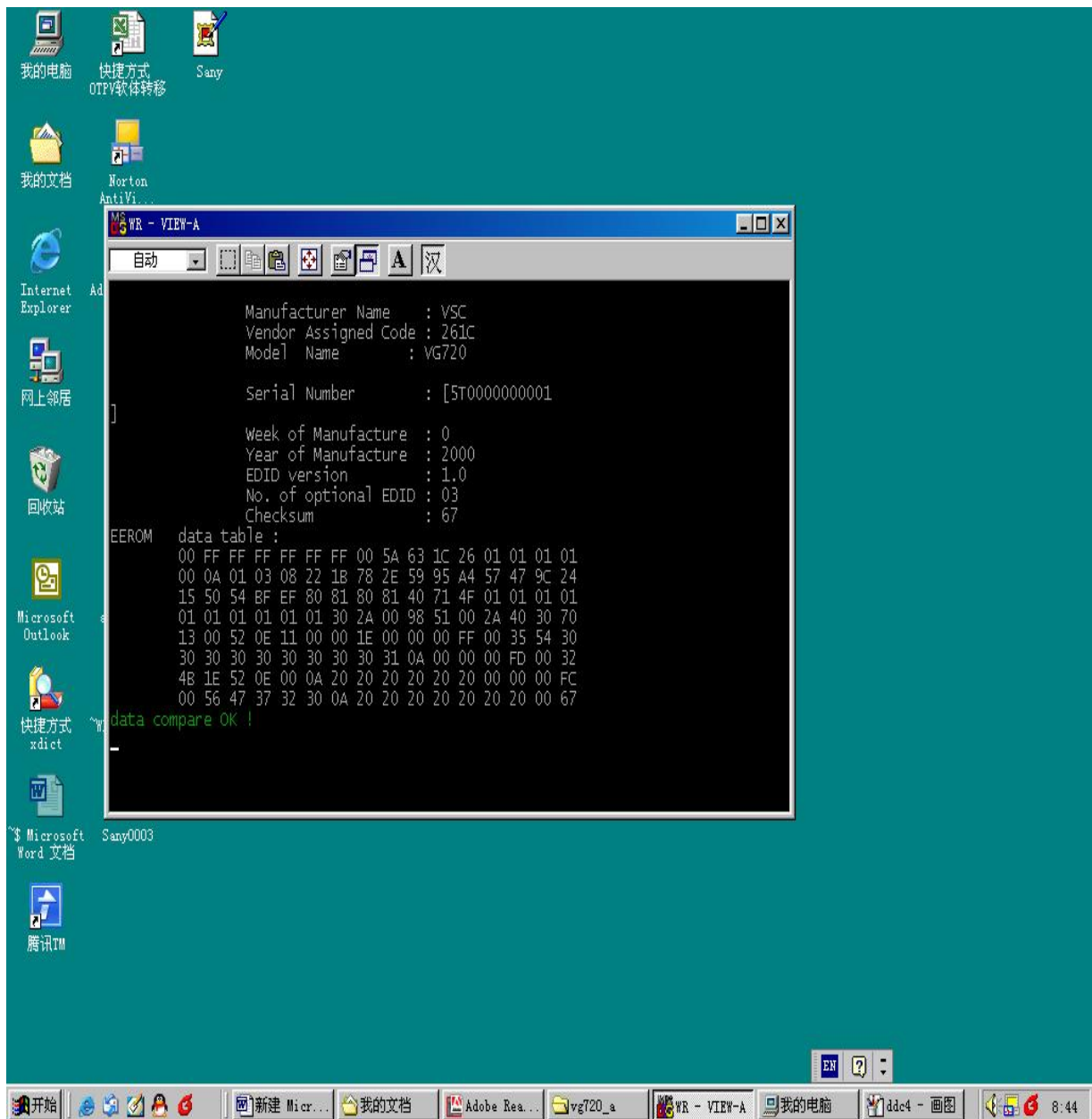


Sep3:Key the “Enter” and write the data

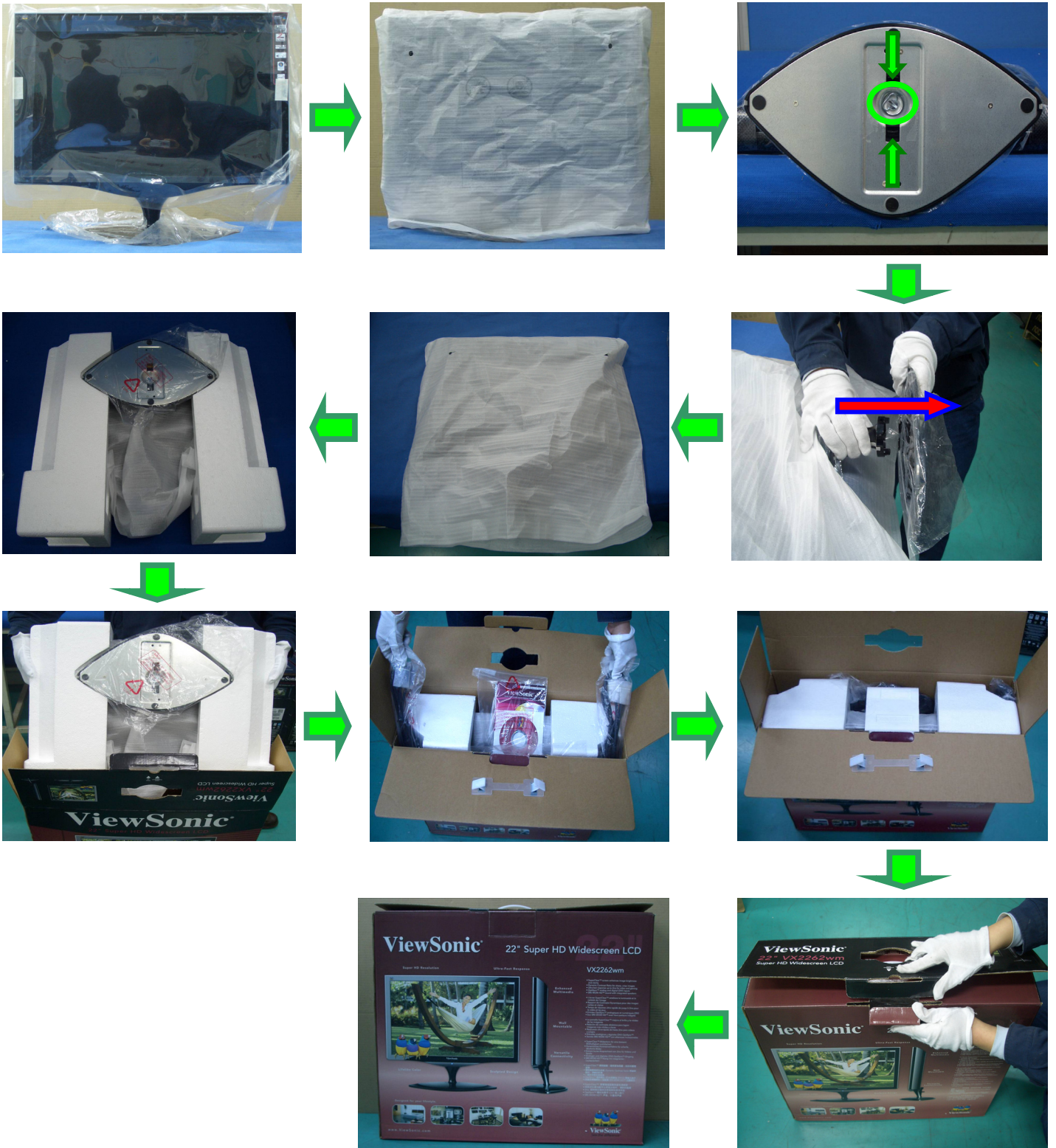




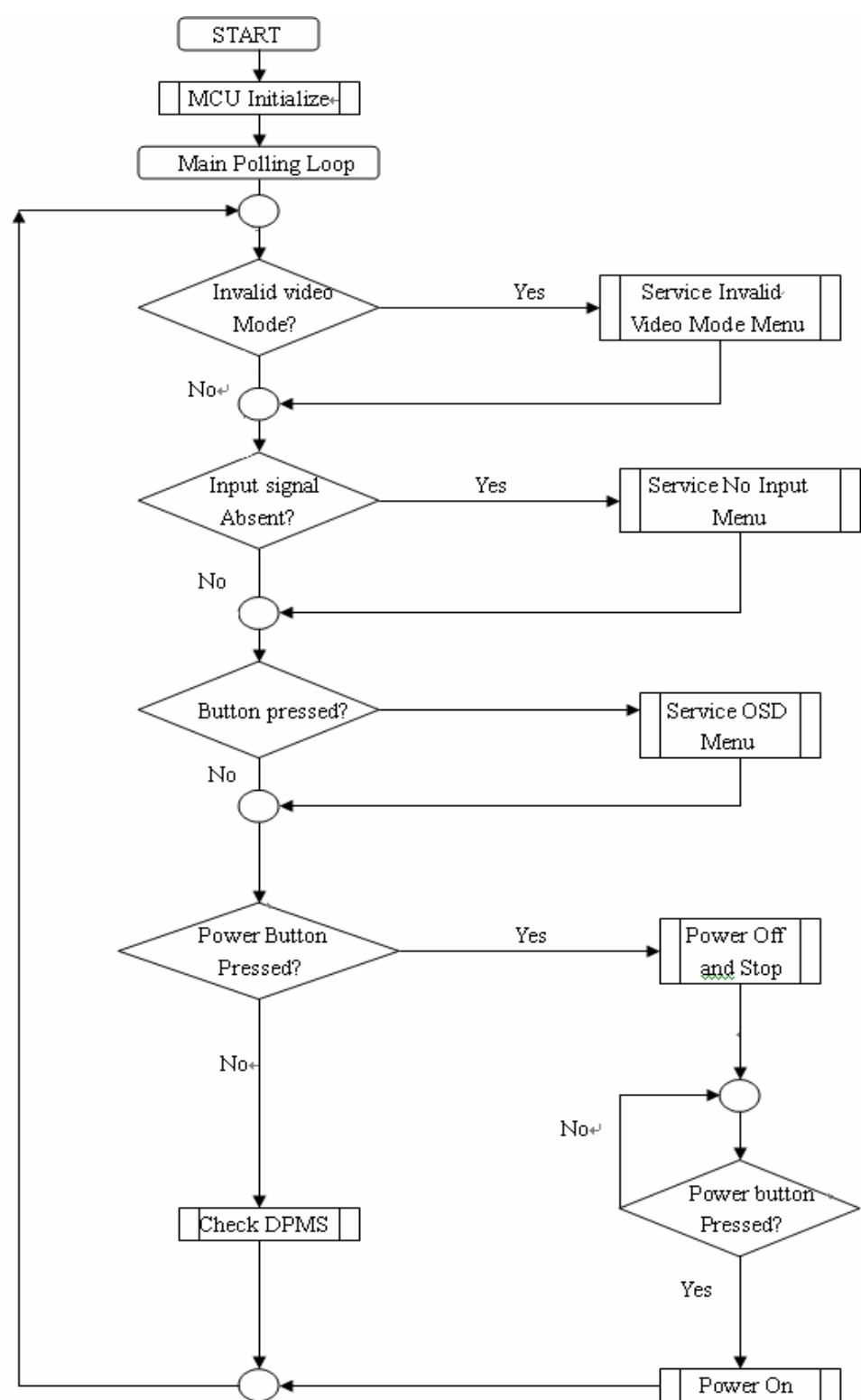
Sep4:If ddc program OK and show “data compare ok”



## 5.7 Packing Procedure



6. Troubleshooting Flow Chart



## 7. Recommended Spare Part List

### VX2262wm BOM list——TC8MM8MKWHVSD1J

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
1		023G3178709 3A	LOGO			1
2		023G3178709 4A	VSC17-LCD FRONT LOGO			1
3		040G 45760819A	DATE/MODEL LABEL			1
4		040G 459709 1B	CARTON LABEL			1
5		040G 459709 4A	H/V WARNING LABEL			1
6		040G 459709 5A	HI-POT LABEL FOR 17-LCD			1
7		040G 581 26704	SHIPPING LABEL			1
8		040G 58162435A	P/N LABEL			1.05
9		045G 77 3	PE PACKING			1.73
10		050G 600 1 W	WHITE STRAP			74
11		052G 1185 24	VSC TAPE			65
12		052G 2191 D	PAPER TAPE			75
13		078G 502700 Y	SPEAKER 4Ω/3W			1
14		089G 17356G554	AUDIO CABLE	E08904		1
15		089G 728CAA902	SIGNAL CABLE 1.8M	E08902		1
16		089G 728GAA902	SIGNAL CABLE	E08902		1
17		089G1748HAA AD	DVI CABLE	E08903		1
18		089G179J30H 9	FFC CABLE 30P 210mm P1.0	E08907		1
19		089G402A18N IS	POWER CORD/(TPV 共用) 32-D022438	E08901		1
20		089G402A18N YH	POWER CORD(32-D022438) (美規)	E08901		1
21		095G8014 6W715	WIRE HARNESS 6P(PH)-6P(PH) 170M	E09502		1
22		095G8014 6X715	WIRE HARNESS 6P(PH)-6P(PH) 170M	E09502		1
23		0M1G 130 5120	SCREW	XN01A		4
24		0M1G 930 10120	SCREW	XN01A		1
25		0M1G1730 6120	SCREW, 42-D020523	XN01A		2
26		0M1G1730 6120	SCREW, 42-D020523	XN01B		1
27		0M1G1740 10 47 CR3	SCREW	XN01A		4
28		0M1G1740 10120	SCREW 42A9940008	XN01A		3
29		0Q1G 130 6120	SCREW (T3X6)	XN01A		2
30		0Q1G 930 8 47 CR3	SCREW	XN01A		1
31		750GLMC0Z1312N	PANEL M220Z1-L03 C1 NB CMO			1
32		A33G0363ED1 L9073	Deco-Bezel			1

33		A33G0364EC6 L9073	Cover-Hinge			1
34		A33G0365ED1 L9073	Deco-Stand-L			1
35		A33G0366ED1 L9073	Deco-Stand-R			1
36		A33G0367ED1 L9073	Deco-Base-L			1
37		A33G0368ED1 L9073	Deco-Base-R			1
38		A33G0369EC6 L9073	Clip-Cable-Mgt			1
39		A33G0370ED1 L9073	Button-Func			1
40		A33G0371 C 9073	BUTTON Power			1
41		A34G0707EC6 L9073	BEZEL			1
42		A34G0708EC6 L9073	Rear Cover			1
43		A34G0709EC6 L9073	Stand			1
44		A34G0710EC6 L9073	Base			1
45		CBPC8MM8VWJ2	CONVERSION BOARD			1
46		033G3802 6	WAFER	CN402		1
47		033G3802 9	WAFER 9P RIGHT ANELE PITCH	CN701		1
48		033G801930F BH U	CONNECTOR 30PIN	CN301		1
49		040G 45762412B	CBPC LABEL			1.05
50		061G152M339 64	CHIPR 3.3 OHM +-5% 2W	R708		1
51		067G 3151007KV	ELCAP 10UF M 50V 105°C KINGNICH	C402		1
52		067G 3151007KV	ELCAP 10UF M 50V 105°C KINGNICH	C419		1
53		067G 3151014KV	EC 105°C CAP 100UF M 25V	C704		1
54		067G 3151014KV	EC 105°C CAP 100UF M 25V	C706		1
55		067G 3151014KV	EC 105°C CAP 100UF M 25V	C707		1
56		067G 3151014KV	EC 105°C CAP 100UF M 25V	C305		1
57		088G 35315F H	D-SUB 15PIN	CN101		1
58		088G 35424F N	DVI 24PIN CONN F 附螺丝	CN102		1
59		093G 2253B J1	XTL NXS14.31818AE32F-KAB5 20PPM 49/U-S	X401		1
60		SMTC8MM8VWJ2	MAIN BOARD			1
61		056G 562195	IC TSUM058CWHL-LF PQFP-100	U401		1
62		056G 563 52	IC AP1117D33LA T0252-3L ATC	U701		1
63		056G 662 13	IC AZC099-04S SOT23-6L	U103		1
64		056G 662 13	IC AZC099-04S SOT23-6L	U104		1
65		056G 662 13	IC AZC099-04S SOT23-6L	U105		1
66		056G 662 13	IC AZC099-04S SOT23-6L	U106		1
67		056G 662 13	IC AZC099-04S SOT23-6L	U107		1
68		056G1133 34	M24C02-WMN6TP	U102		1
69		056G1133 81	SST25LF020A-33-4C-SAE	U402		1

70		057G 417 12 T	KEC 2N3904S-RTK/PS	Q701		1
71		057G 417 12 T	KEC 2N3904S-RTK/PS	Q401		1
72		057G 417 13 T	KEC 2N3906S-RTK/PS	Q302		1
73		057G 417 22 T	TRA KN2907AS -60V/-0.6A SOT-23	Q703		1
74		057G 417 22 T	TRA KN2907AS -60V/-0.6A SOT-23	Q702		1
75		057G 763 1	A03401 SOT23 BY AOS(A1)	Q301		1
76		061G0402000	RST CHIPR 0 OHM +-5% 1/16W	R430		1
77		061G0402000	RST CHIPR 0 OHM +-5% 1/16W	R423		1
78		061G0402100	RST CHIPR 10 OHM +-5% 1/16W	R128		1
79		061G0402100	RST CHIPR 10 OHM +-5% 1/16W	R129		1
80		061G0402100	RST CHIPR 10 OHM +-5% 1/16W	R130		1
81		061G0402100	RST CHIPR 10 OHM +-5% 1/16W	R131		1
82		061G0402100	RST CHIPR 10 OHM +-5% 1/16W	R134		1
83		061G0402100	RST CHIPR 10 OHM +-5% 1/16W	R132		1
84		061G0402100	RST CHIPR 10 OHM +-5% 1/16W	R126		1
85		061G0402100	RST CHIPR 10 OHM +-5% 1/16W	R127		1
86		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R117		1
87		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R118		1
88		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R119		1
89		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R115		1
90		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R114		1
91		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R113		1
92		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R111		1
93		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R109		1
94		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R105		1
95		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R101		1
96		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R445		1
97		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R431		1
98		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R409		1
99		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R415		1
100		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R416		1
101		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R417		1
102		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R422		1
103		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R424		1
104		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R425		1
105		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R428		1
106		061G0402101	RST CHIPR 100 OHM +-5% 1/16W	R429		1
107		061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	R706		1

108		061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	R104		1
109		061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	R103		1
110		061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	R705		1
111		061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	R703		1
112		061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	R702		1
113		061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	R427		1
114		061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	R426		1
115		061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	R413		1
116		061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	R412		1
117		061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	R411		1
118		061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	R408		1
119		061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	R303		1
120		061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	R135		1
121		061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	R133		1
122		061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	R120		1
123		061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	R407		1
124		061G0402104	RST CHIPR 100 KOHM +-5% 1/16W	R421		1
125		061G0402121	RST CHIP 120R 1/16W 5%	R419		1
126		061G0402201	RST CHIP 200R 1/16W 5%	R420		1
127		061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	R106		1
128		061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	R107		1
129		061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	R406		1
130		061G0402390 0F	RST CHIP 390R 1/16W 1%	R401		1
131		061G0402390 1F	RST CHIPR 3.9KOHM +-1% 1/16W	R444		1
132		061G0402390 1F	RST CHIPR 3.9KOHM +-1% 1/16W	R443		1
133		061G0402471	RST CHIPR 470 OHM +-5% 1/16W	R110		1
134		061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	R124		1
135		061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	R125		1
136		061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	R137		1
137		061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	R138		1
138		061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	R302		1
139		061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	R704		1



140		061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	R709		1
141		061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	R136		1
142		061G0402473	RST CHIPR 47 KOHM +-5% 1/16W	R304		1
143		061G0402682	RST CHIP 6K8 1/16W 5%	R139		1
144		061G0402682	RST CHIP 6K8 1/16W 5%	R410		1
145		061G0402750	RST CHIPR 75 OHM +-5% 1/16W	R116		1
146		061G0402750	RST CHIPR 75 OHM +-5% 1/16W	R112		1
147		061G0402750	RST CHIPR 75 OHM +-5% 1/16W	R108		1
148		061G0603000	RST CHIPR 0 OHM +-5% 1/10W	FB104		1
149		061G0603000	RST CHIPR 0 OHM +-5% 1/10W	FB105		1
150		061G0603000	RST CHIPR 0 OHM +-5% 1/10W	R102		1
151		061G0805000 F	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	FB403		1
152		061G0805000 F	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	R305		1
153		061G0805000 F	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	R403		1
154		061G1206331	RST CHIPR 330 OHM +-5% 1/4W	R301		1
155		065G0402102 32	1000PF +-10% 50V X7R	C107		1
156		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C413		1
157		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C412		1
158		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C411		1
159		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C410		1
160		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C409		1
161		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C408		1
162		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C407		1
163		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C406		1
164		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C405		1
165		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C404		1
166		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C403		1
167		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C301		1
168		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C115		1
169		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C416		1
170		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C709		1
171		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C708		1
172		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C705		1
173		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C701		1
174		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C435		1



175		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C434		1
176		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C433		1
177		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C432		1
178		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C431		1
179		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C422		1
180		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C418		1
181		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C417		1
182		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C415		1
183		065G0402104 15	MLCC 0402 0.1UF K 16V X5R	C414		1
184		065G0402105 A5	CAP 0402 1UF K 10V X5R	C302		1
185		065G0402220 31	CHIP 22PF 50V NPO	C103		1
186		065G0402220 31	CHIP 22PF 50V NPO	C104		1
187		065G0402224 17	CAP CER 0.22UF -20%-80%	C401		1
188		065G0402224 17	CAP CER 0.22UF -20%-80%	C423		1
189		065G0402224 17	CAP CER 0.22UF -20%-80%	C117		1
190		065G0402470 31	MLCC 0402 CAP 47PF J 50V NPO	C421		1
191		065G0402470 31	MLCC 0402 CAP 47PF J 50V NPO	C420		1
192		065G0402473 12	CHIP 0.047uF 16V X7R	C102		1
193		065G0402473 12	CHIP 0.047uF 16V X7R	C106		1
194		065G0402473 12	CHIP 0.047uF 16V X7R	C108		1
195		065G0402473 12	CHIP 0.047uF 16V X7R	C110		1
196		065G0402473 12	CHIP 0.047uF 16V X7R	C111		1
197		065G0402473 12	CHIP 0.047uF 16V X7R	C114		1
198		065G0402509 31	CHIP 5pF 50V NPO	C105		1
199		065G0402509 31	CHIP 5pF 50V NPO	C109		1
200		065G0402509 31	CHIP 5pF 50V NPO	C113		1
201		071G 56V301 M	CHIP BEAD 2012 300 OHM	FB401		1
202		071G 56V301 M	CHIP BEAD 2012 300 OHM	FB402		1
203		071G 56V301 M	CHIP BEAD 2012 300 OHM	FB404		1
204		071G 59K190 B	19 OHM BEAD	FB103		1
205		071G 59K190 B	19 OHM BEAD	FB102		1
206		071G 59K190 B	19 OHM BEAD	FB101		1
207		093G 60505	DIO SIG SM BAT54C(PHSE)R	D104		1
208		093G 60505	DIO SIG SM BAT54C(PHSE)R	D108		1
209		093G 60505	DIO SIG SM BAT54C(PHSE)R	D109		1
210		093G 39GA01 T	RLZ5.6B	ZD104		1
211		093G 39GA01 T	RLZ5.6B	ZD105		1
212		093G3004 3	SM340A	D701		1
213		715G2883 1 1	MAIN PCB(FR-4 80x67MM PANELS/9PCS) DS			1

214		J01G6022800	SCREW M6X10			1
215		J07G 1 S126	WOODEN PALLET			0.021
216		J12G 808 1	RUBBER VESA			1
217		J15G0404 2	Bkt_Base			1
218		J15G2262 1	MAIN FRAME			1
219		J20G0008 1	DIECAST			1
220		J37G0077 1	HINGE			1
221		J40G 22N709 1B	ID LABEL VX2262WM			1
222		J40G POP709 2A	POP LABEL			1
223		J40G581B709 6A	S/N LABEL VA1716			2
224		J41G780170920A	RETURN PREVENTION FLYER			1
225		J41G780270915C	QSG FOR VX2262WM			1
226		J41G780270917A	SERVICE INSERT CARD			1
227		J41G780270918A	INSTALL STAND CARD			1
228		J44G6002 S129	PAPER PLATE			0.042
229		J44G6002 S130	PAPER PLATE			0.021
230		J44G9003210 35	CORNER PAPER			0.083
231		J44GC042 1	EPS			1
232		J44GC042 2	EPS			1
233		J44GC042709 3A	CARTON			1
234		J45G 76 28V3A	PE BAG FOR MANUAL-CARD			1
235		J45G 88606 R	PE BAG FOR BASE			1
236		J45G 88609700	EPE BAG FOR MONITOR			1
237		J50G 600 5	HANDLE 1			1
238		J50G 600 6	HANDLE 2			1
239		J52G6020 22	PROTECT FILM			1
240		J70G2201709 2A	CD MANUAL			1
241		KEPC8JC5	KEPC BOARD G2970-A-X-X-2-071229			1
242		033G3802 6H	WAFER 6P RIGHT ANGLE PITCH 2.0	CN001		1
243		077G 602 1 CJ	TACT SWITCH	SW003		1
244		077G 603 2 CJ	TACT SWITCH	SW001		1
245		077G 603 2 CJ	TACT SWITCH	SW002		1
246		077G 603 2 CJ	TACT SWITCH	SW004		1
247		077G 603 2 CJ	TACT SWITCH	SW005		1
248		081G 122CT GP	LED GP34032C/G307-ZY-60	LED001		1
249		SMTKEPC8JC5	KEPC BOARD FOR SMT			1
250		061G0603200 1F	RST CHIPR 2 KOHM +-1% 1/10W	R003		1
251		061G0603200 1F	RST CHIPR 2 KOHM +-1% 1/10W	R004		1

252		061G0603300 1F	RST CHIPR 3 KOHM +-1% 1/10W	R002		1
253		061G0603300 1F	RST CHIPR 3 KOHM +-1% 1/10W	R001		1
254		093G 39S 34 T	UDZSNP5.6B ROHM	D101		1
255		093G 39S 34 T	UDZSNP5.6B ROHM	D102		1
256		093G 39S 34 T	UDZSNP5.6B ROHM	D103		1
257		093G 39S 34 T	UDZSNP5.6B ROHM	D104		1
258		093G 39S 34 T	UDZSNP5.6B ROHM	D105		1
259		715G2970 1	KEPC-PCB (FR-4 124x17mm) DS			1
260		PWPC7C42MJBA	POWER BOARD G2824-1-2-X-1-080318			1
261		033G3802 4	WAFER EH-4	CN602		1
262		033G8021 2E U	INVERT CONNECTOR	CN801		1
263		033G8021 2E U	INVERT CONNECTOR	CN802		1
264		033G8021 2E U	INVERT CONNECTOR	CN803		1
265		033G8021 2E U	INVERT CONNECTOR	CN804		1
266		033G8021 2E AC	WAFER	CN804		1
267		033G8021 2E AC	WAFER	CN803		1
268		033G8021 2E AC	WAFER	CN802		1
269		033G8021 2E AC	WAFER	CN801		1
270		040G 45762420A	LABEL 25x6mm			1
271		051G 200 1	OIL FOR DISAPPEAR			0.3
272		056G 139 3A	IC PC123Y22FZ0F	IC903		1
273		056G 616 34	IC APA2069JITUL 2.6W*2 PDIP-16	IC601		1
274		061G 5810T	RST NTCR 8 OHM +-20% 4A 13mm THINKING	NR901		1
275		063G 10747410S	塑膠膜 CAPACITOR	C903		1
276		063G 10747410V	0.47UF 275VAC ARCO	C903		1
277		063G107K474 6S	CAP X2 0.47UF K 275VAC	C903		1
278		065G 3J1806ET	18PF 5% SL3KV TDK	C826		1
279		065G 3J1806ET	18PF 5% SL3KV TDK	C825		1
280		065G 3J1806ET	18PF 5% SL3KV TDK	C812		1
281		065G 3J1806ET	18PF 5% SL3KV TDK	C801		1
282		065G306M1022BP	1000PF Y1.CAP	C901		1
283		065G306M1022BP	1000PF Y1.CAP	C902		1
284		065G306M3322BP	3300PF 20%	C900		1
285		067G215D6814KV	CAP 105°C 680uF M 25V	C918		1
286		067G215D6814KV	CAP 105°C 680uF M 25V	C917		1
287		067G215S102 3K	ED1000UF 16V	C916		1
288		067G215S102 3K	ED1000UF 16V	C934		1

289		067G215S1024KV	EC 105°C CAP 1000UF M 25V	C939		1
290		067G215S4713KV	EC 105°C CAP 470UF M 16V	C915		1
291		067G215S4714KL	LOW ESR EC 470UF 25V BY 金山	C811		1
292		067G215S4714KL	LOW ESR EC 470UF 25V BY 金山	C805		1
293		067G315Z12115K	CAP 105°C 120UF M 450V	C905		1
294		073G 253 91 L GP	CHOKE BY LI TA	L905		1
295		073G 253 91 L GP	CHOKE BY LI TA	L904		1
296		073G 253 91 L GP	CHOKE BY LI TA	L903		1
297		073L 174 40 HG	GBQM4.778.391	L901		1
298		073L 174 40 LG	LINE FILTER	L901		1
299		080GL20T510 DN	X' FMR INVERTER 142uH	T801		1
300		080GL20T510 DN	X' FMR INVERTER 142uH	T802		1
301		080GL22T 3 N	X' FMR 510uH YUVA-822	T901		1
302		087G 501 32 S	AC SOCKET	CN901		1
303		088G 30214K DC	PHONE JACK 5PIN +开口向下弹片	CN601		1
304		093G 50460900	BRIDGE DIODE GBU408 LITEON	BD901		1
305		093G3006 1 1	31DQ06FC3 NIHON INTER	D907		1
306		095G 82014D701	WIRE HARNESS 14P (SAN)-9P (PH) 130MM	CN902		1
307		095G 82014W701	WIRE HARNESS 14P (SAN)-9P (PH) 130MM	CN902		1
308		095G 82014X701	WIRE HARNESS 14P (SAN)-9P (PH) 130MM	CN902		1
309		705GQ757021	Q901 ASS'Y			1
310		051G 200 1	OIL FOR DISAPPEAR			0.2
311		057G 724 11	STP9NK65ZFP	Q901		1
312		0M1G1730 8120	SCREW	XN01A		1
313		Q90G6263 6	HEAT SINK	HS5		1
314		705GQ793070	D906 ASS'Y			1
315		051G 200 1	OIL FOR DISAPPEAR			0.2
316		093G 60238	FCH10A15	D906		1
317		093G 60245	SP10150 10A 150V ITO-220 BY SECOS	D906		1
318		0M1G1730 8120	SCREW	XN01A		1
319		Q90G6263 6	HEAT SINK	HS3		1
320		705GQ793071	D908 ASS'Y			1
321		051G 200 1	OIL FOR DISAPPEAR			0.2

322		093G 60251	FCQ10U06	D908		1
323		093G 60278	DIODE SP1060 ITO-220 SECOS	D908		1
324		0M1G1730 8120	SCREW	XN01A		1
325		Q90G6263 6	HEAT SINK	HS6		1
326		PW7C42MJBASMT	POWER BOARD FOR SMT			1
327		056G 379 22	IC TL494IDR SOIC-16	U801		1
328		056G 379 98	IC LD7552DPS SOP-8	U901		1
329		057G 417 4	PMBS3904/PHILIPS-SMT (04)	Q903		1
330		057G 417 4	PMBS3904/PHILIPS-SMT (04)	Q811		1
331		057G 417 4	PMBS3904/PHILIPS-SMT (04)	Q810		1
332		057G 417 4	PMBS3904/PHILIPS-SMT (04)	Q807		1
333		057G 417 4	PMBS3904/PHILIPS-SMT (04)	Q803		1
334		057G 417 6	PMBS3906/PHILIPS-SMT (06)	Q805		1
335		057G 417 6	PMBS3906/PHILIPS-SMT (06)	Q806		1
336		057G 417 6	PMBS3906/PHILIPS-SMT (06)	Q607		1
337		057G 417511	MMBT3904	Q803		1
338		057G 417511	MMBT3904	Q807		1
339		057G 417511	MMBT3904	Q810		1
340		057G 417511	MMBT3904	Q811		1
341		057G 417511	MMBT3904	Q903		1
342		057G 417512	MMBT3906	Q607		1
343		057G 417512	MMBT3906	Q806		1
344		057G 417512	MMBT3906	Q805		1
345		057G 600 55	P5506 HVG SO-8	Q809		1
346		057G 600 55	P5506 HVG SO-8	Q804		1
347		057G 759 2	RK7002	Q812		1
348		057G 759 2	RK7002	Q608		1
349		057G 759 2	RK7002	Q808		1
350		057G 760 4A	DTA144WN3/S SOT-23	Q801		1
351		057G 760 4B	PDTA144WK SOT346	Q801		1
352		057G 760 5A	DTC 144WN3/S SOT-23	Q802		1
353		057G 760 5B	PDTC144WK SOT346	Q802		1
354		061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	R827		1
355		061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	R848		1
356		061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	R849		1
357		061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	R926		1
358		061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	R942		1
359		061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	R831		1
360		061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	R824		1
361		061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	R819		1

362		061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	R808		1
363		061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	R852		1
364		061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	R840		1
365		061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	R838		1
366		061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	R833		1
367		061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	R853		1
368		061G0603101	RST CHIPR 100 OHM +-5% 1/10W	R813		1
369		061G0603102	RST CHIPR 1K OHM +-5% 1/10W	R803		1
370		061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	R603		1
371		061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	R604		1
372		061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	R605		1
373		061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	R609		1
374		061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	R823		1
375		061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	R601		1
376		061G0603105	RST CHIPR 1M OHM +-5% 1/10W	R809		1
377		061G0603105	RST CHIPR 1M OHM +-5% 1/10W	R821		1
378		061G0603105	RST CHIPR 1M OHM +-5% 1/10W	R836		1
379		061G0603105	RST CHIPR 1M OHM +-5% 1/10W	R817		1
380		061G0603205	RST CHIPR 2 MOHM +-5% 1/10W	R818		1
381		061G0603220	RST CHIPR 22 OHM +-5% 1/10W	R847		1
382		061G0603220	RST CHIPR 22 OHM +-5% 1/10W	R844		1
383		061G0603243 1F	RST CHIPR 2.43K OHM +-1% 1/10W	R930		1
384		061G0603243 1F	RST CHIPR 2.43K OHM +-1% 1/10W	R927		1
385		061G0603273	RST CHIPR 27 KOHM +-5% 1/10W	R610		1
386		061G0603300 2F	RST CHIPR 30 KOHM +-1% 1/10W	R815		1
387		061G0603362	RST CHIPR 3.6 KOHM +-5% 1/10W	R612		1
388		061G0603470 2F	RST CHIPR 47 KOHM +-1% 1/10W	R842		1
389		061G0603470 2F	RST CHIPR 47 KOHM +-1% 1/10W	R828		1
390		061G0603472	RST CHIPR 4.7K OHM +-5% 1/10W	R805		1
391		061G0603472	RST CHIPR 4.7K OHM +-5% 1/10W	R611		1
392		061G0603473	RST CHIPR 47 KOHM +-5% 1/10W	R822		1
393		061G0603564	RST CHIPR 560 KOHM +-5% 1/10W	R820		1
394		061G0603622	RST CHIPR 6.2 KOHM +-5% 1/10W	R607		1

395		061G0603622	RST CHIPR 6.2 KOHM +-5% 1/10W	R606		1
396		061G0603680	RST CHIPR 68 OHM +-5% 1/10W	R845		1
397		061G0603680	RST CHIPR 68 OHM +-5% 1/10W	R846		1
398		061G0603680 2F	RST CHIPR 68K OHM +-1% 1/10W	R829		1
399		061G0603680 2F	RST CHIPR 68K OHM +-1% 1/10W	R816		1
400		061G0603820 2F	RST CHIPR 82 KOHM +-1% 1/10W	R814		1
401		061G0805000	RST CHIPR 0 OHM +-5% 1/8W	RJ610		1
402		061G0805000	RST CHIPR 0 OHM +-5% 1/8W	R608		1
403		061G0805000	RST CHIPR 0 OHM +-5% 1/8W	R801		1
404		061G0805000	RST CHIPR 0 OHM +-5% 1/8W	R804		1
405		061G0805000	RST CHIPR 0 OHM +-5% 1/8W	R830		1
406		061G0805000	RST CHIPR 0 OHM +-5% 1/8W	R832		1
407		061G0805100 1F	RST CHIPR 1K OHM +-1% 1/8W	R806		1
408		061G0805100 1F	RST CHIPR 1K OHM +-1% 1/8W	R807		1
409		061G0805100 1F	RST CHIPR 1K OHM +-1% 1/8W	R834		1
410		061G0805100 1F	RST CHIPR 1K OHM +-1% 1/8W	R835		1
411		061G0805100 4F	RST CHIPR 1 MOHM +-1% 1/8W	R843		1
412		061G0805101	RST CHIPR 100 OHM +-5% 1/8W	R802		1
413		061G0805102	RST CHIPR 1K OHM +-5% 1/8W	R939		1
414		061G0805102	RST CHIPR 1K OHM +-5% 1/8W	R925		1
415		061G0805103	RST CHIPR 10K OHM +-5% 1/8W	R938		1
416		061G0805150 1F	RST CHIPR 1.5 KOHM +-1% 1/8W	R841		1
417		061G0805150 1F	RST CHIPR 1.5 KOHM +-1% 1/8W	R839		1
418		061G0805150 1F	RST CHIPR 1.5 KOHM +-1% 1/8W	R812		1
419		061G0805150 1F	RST CHIPR 1.5 KOHM +-1% 1/8W	R811		1
420		061G0805151	RST CHIPR 150 OHM +-5% 1/8W	R924		1
421		061G0805221 3F	RST CHIPR 221 KOHM 1/8W +-5%	R826		1
422		061G0805471	RST CHIPR 470 OHM +-5% 1/8W	R943		1
423		061G0805510 2F	RST CHIPR 51K OHM +-1% 1/8W	R825		1
424		061G1206000	RST CHIPR 0 OHM +-5% 1/4W	RJ809		1
425		061G1206000	RST CHIPR 0 OHM +-5% 1/4W	RJ808		1
426		061G1206000	RST CHIPR 0 OHM +-5% 1/4W	RJ807		1
427		061G1206000	RST CHIPR 0 OHM +-5% 1/4W	RJ806		1
428		061G1206000	RST CHIPR 0 OHM +-5% 1/4W	RJ805		1
429		061G1206000	RST CHIPR 0 OHM +-5% 1/4W	RJ804		1
430		061G1206000	RST CHIPR 0 OHM +-5% 1/4W	RJ803		1
431		061G1206000	RST CHIPR 0 OHM +-5% 1/4W	RJ802		1
432		061G1206000	RST CHIPR 0 OHM +-5% 1/4W	RJ801		1
433		061G1206000	RST CHIPR 0 OHM +-5% 1/4W	FB902		1

434		061G1206000	RST CHIPR 0 OHM +-5% 1/4W	RJ810		1
435		061G1206000	RST CHIPR 0 OHM +-5% 1/4W	RJ901		1
436		061G1206100	RST CHIPR 10 OHM +-5% 1/4W	R910		1
437		061G1206101	RST CHIPR 100 OHM +-5% 1/4W	R918		1
438		061G1206101	RST CHIPR 100 OHM +-5% 1/4W	R919		1
439		061G1206101	RST CHIPR 100 OHM +-5% 1/4W	R920		1
440		061G1206101	RST CHIPR 100 OHM +-5% 1/4W	R935		1
441		061G1206101	RST CHIPR 100 OHM +-5% 1/4W	R949		1
442		061G1206101	RST CHIPR 100 OHM +-5% 1/4W	R950		1
443		061G1206101	RST CHIPR 100 OHM +-5% 1/4W	R951		1
444		061G1206101	RST CHIPR 100 OHM +-5% 1/4W	R961		1
445		061G1206101	RST CHIPR 100 OHM +-5% 1/4W	R962		1
446		061G1206105	1M 1206	R901		1
447		061G1206105	1M 1206	R902		1
448		061G1206150	RST CHIPR 15 OHM +-5% 1/4W	R851		1
449		061G1206150	RST CHIPR 15 OHM +-5% 1/4W	R850		1
450		061G1206150	RST CHIPR 15 OHM +-5% 1/4W	R837		1
451		061G1206150	RST CHIPR 15 OHM +-5% 1/4W	R810		1
452		061G1206221	RST CHIPR 220 OHM +-5% 1/4W	R912		1
453		061G1206304	RST CHIPR 300k OHM +-5% 1/4W	R904		1
454		061G1206304	RST CHIPR 300k OHM +-5% 1/4W	R905		1
455		061G1206304	RST CHIPR 300k OHM +-5% 1/4W	R906		1
456		061G1206519	RST CHIPR 5.1 OHM +-5% 1/4W	R909		1
457		065G0603101 31	CER1 0603 NP0 50V 100P PM5 R	C611		1
458		065G0603101 31	CER1 0603 NP0 50V 100P PM5 R	C610		1
459		065G0603102 32	1000PF +-10% 50V X7R	C932		1
460		065G0603104 12	CER2 0603 X7R 16V 100N P	C807		1
461		065G0603104 12	CER2 0603 X7R 16V 100N P	C804		1
462		065G0603104 12	CER2 0603 X7R 16V 100N P	C613		1
463		065G0603104 12	CER2 0603 X7R 16V 100N P	C612		1
464		065G0603104 12	CER2 0603 X7R 16V 100N P	C814		1
465		065G0603104 22	CAP CHIP 0603 0.1UF K 25V X7R	C810		1
466		065G0603105 12	CHIP 1UF 16VX7R 0603	C820		1
467		065G0603105 12	CHIP 1UF 16VX7R 0603	C819		1
468		065G0603105 12	CHIP 1UF 16VX7R 0603	C806		1
469		065G0603105 12	CHIP 1UF 16VX7R 0603	C802		1
470		065G0603222 22	CHIP 2200PF 25V X7R	C818		1
471		065G0603222 22	CHIP 2200PF 25V X7R	C817		1
472		065G0603222 22	CHIP 2200PF 25V X7R	C815		1
473		065G0603222 22	CHIP 2200PF 25V X7R	C813		1



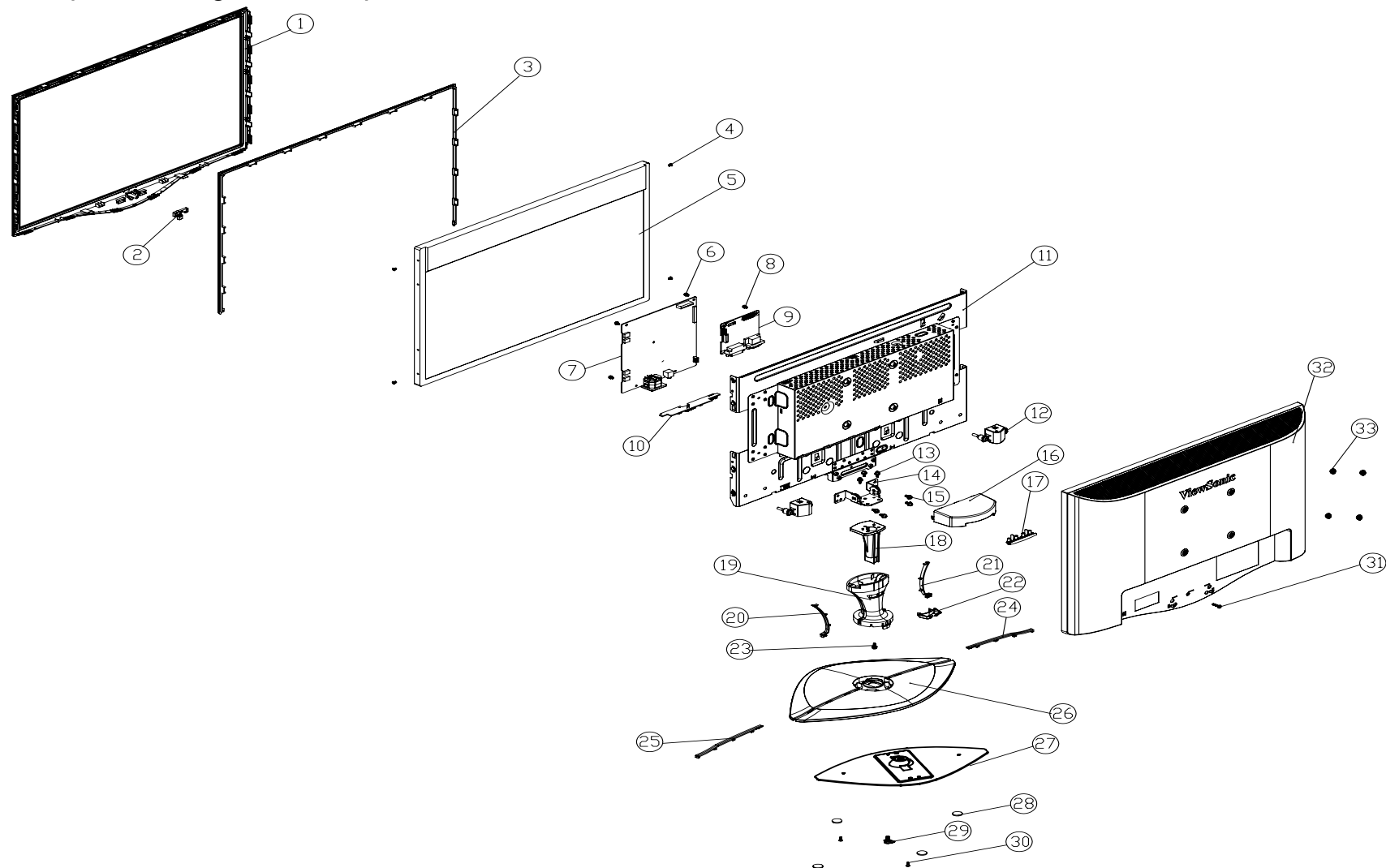
474		065G0603474 12	MLCC 0603 0.47UF K 16V X7R	C601		1
475		065G0603474 12	MLCC 0603 0.47UF K 16V X7R	C602		1
476		065G0603474 12	MLCC 0603 0.47UF K 16V X7R	C603		1
477		065G0603474 12	MLCC 0603 0.47UF K 16V X7R	C606		1
478		065G0805102 31	CAP CHIP 0805 1000PF J 50V NPO	C928		1
479		065G0805104 22	0.1UF +-10% 25V X7R 080	C824		1
480		065G0805104 22	0.1UF +-10% 25V X7R 080	C823		1
481		065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	C940		1
482		065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	C931		1
483		065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	C930		1
484		065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	C924		1
485		065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	C907		1
486		065G0805105 22	CAP CHIP 0805 1uF K 25V X7R	C609		1
487		065G0805105 22	CAP CHIP 0805 1uF K 25V X7R	C608		1
488		065G0805152 32	CHIP 1500PF 50V X7R 0805	C803		1
489		065G0805152 32	CHIP 1500PF 50V X7R 0805	C816		1
490		065G0805152 32	CHIP 1500PF 50V X7R 0805	C828		1
491		065G0805152 32	CHIP 1500PF 50V X7R 0805	C827		1
492		065G0805152 32	CHIP 1500PF 50V X7R 0805	C822		1
493		065G0805152 32	CHIP 1500PF 50V X7R 0805	C821		1
494		065G080522131G	CAP CHIP 0805 220PF G 50V NPO	C809		1
495		065G0805225 12	CAP CHIP 0805 2.2UF K 16V X7R	C808		1
496		065G0805471 21	CAP CHIP 0805 470PF J 25V NPO	C909		1
497		065G0805473 32	CHIP 0.047UF 50V X7R	C910		1
498		065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	C935		1
499		065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	C929		1
500		065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	C912		1
501		093G 64 33	DIO SIG SM BAV99 (PHSE)R	D810		1
502		093G 64 33	DIO SIG SM BAV99 (PHSE)R	D809		1
503		093G 64 33	DIO SIG SM BAV99 (PHSE)R	D802		1
504		093G 64 33	DIO SIG SM BAV99 (PHSE)R	D801		1
505		093G 64 38 D	DIODE BAW56 DIODES	D808		1
506		093G 64 38 D	DIODE BAW56 DIODES	D806		1
507		093G 64 38 P	BAW56	D808		1
508		093G 64 38 P	BAW56	D806		1
509		093G 6432P	LL4148	D813		1

510		093G 6432P	LL4148	D803		1
511		093G 6432P	LL4148	D807		1
512		093G 6432P	LL4148	D811		1
513		093G 6432P	LL4148	D812		1
514		093G 6432P	LL4148	D903		1
515		093G 39S 12 T	RLZ20B LLDS	ZD921		1
516		093G 39S 24 T	RLZ 5.6B LLDS	ZD922		1
517		093G 39S 44 T	RLZ18B LLDS	ZD902		1
518		093G 39S106 T	DIODE RLZ6.8C TE-11 500mW/6.8V LL-34	ZD801		1
519		PW7C42MJBAAI	POWER BOARD FOR AI			1
520		006G 31500	EYELET	CN901		2
521		006G 31502	1.5MM RIVET	T901		4
522		056G 158 10 T	IC AZ431AZ-AE1 TO-92 BY AAC	IC904		1
523		056G 158 12	KIA431A-AT/P TO-92	IC904		1
524		061G152M10452T	RST MOFR 100KOHM +-5% 2WS	R903		1
525		061G152M15152T	RST MOFR 150 OHM +-5% 2WS	R946		1
526		061G152M39852T	RST MOFR 0.39 OHM +-5% 2WS	R914		1
527		065G 2K152 1T6213	CAP CER 1500PF K 2KV	C906		1
528		067G215Y1014KT	EC CAP. 105°C	C604		1
529		067G215Y2207KT	CAP 105°C 22UF M 50V KINGNICH	C605		1
530		067G215Y2207KT	CAP 105°C 22UF M 50V KINGNICH	C908		1
531		071G 55 9 T	FERRITE BEAD	FB602		1
532		071G 55 29	FERRITE BEAD	FB901		1
533		071G 55 29	FERRITE BEAD	FB903		1
534		071G 55 29	FERRITE BEAD	FB904		1
535		073G 54229 5T	PEAKING COIL 2.2uH 5%	L906		1
536		084G 56 3 B	FUSE 3.15A 250V	F901		1
537		084G 56 3 B	FUSE 3.15A 250V	F902		1
538		084G 56 3 B	FUSE 3.15A 250V	F903		1
539		084G 56 3W	FUSE	F903		1
540		084G 56 3W	FUSE	F902		1
541		084G 56 3W	FUSE	F901		1
542		093G 6026T52T	RECTIFIER DIODE FR107	D900		1
543		093G 6038T52T	FR103	D901		1
544		095G 90 23	JUMP	J912		1
545		095G 90 23	JUMP	J915		1
546		095G 90 23	JUMP	J815		1

547		095G 90 23	JUMP	J601		1
548		095G 90 23	JUMP	J602		1
549		095G 90 23	JUMP	J603		1
550		095G 90 23	JUMP	J604		1
551		095G 90 23	JUMP	J801		1
552		095G 90 23	JUMP	J802		1
553		095G 90 23	JUMP	J803		1
554		095G 90 23	JUMP	J804		1
555		095G 90 23	JUMP	J806		1
556		095G 90 23	JUMP	J807		1
557		095G 90 23	JUMP	J809		1
558		095G 90 23	JUMP	J810		1
559		095G 90 23	JUMP	J811		1
560		095G 90 23	JUMP	J812		1
561		095G 90 23	JUMP	J813		1
562		095G 90 23	JUMP	J814		1
563		095G 90 23	JUMP	J906		1
564		095G 90 23	JUMP	J823		1
565		095G 90 23	JUMP	J605		1
566		095G 90 23	JUMP	J606		1
567		095G 90 23	JUMP	J816		1
568		095G 90 23	JUMP	J817		1
569		095G 90 23	JUMP	J818		1
570		095G 90 23	JUMP	J819		1
571		095G 90 23	JUMP	J820		1
572		095G 90 23	JUMP	J821		1
573		095G 90 23	JUMP	J822		1
574		095G 90 23	JUMP	J901		1
575		095G 90 23	JUMP	J902		1
576		095G 90 23	JUMP	J903		1
577		095G 90 23	JUMP	J904		1
578		095G 90 23	JUMP	J905		1
579		095G 90 23	JUMP	J907		1
580		095G 90 23	JUMP	J910		1
581		095G 90 23	JUMP	J911		1
582		715G2824 1 2	POWER-PCB, FR-1, 94V-0, T1. 6M M, 160*160MM			1
583		Q51G 6 4508	GLUE_RTV			0.2
584		Q90G6295 3	HEAT SINK	HS1		1
585		S73G25391V	CHOKE COIL ASS'Y	L905		1

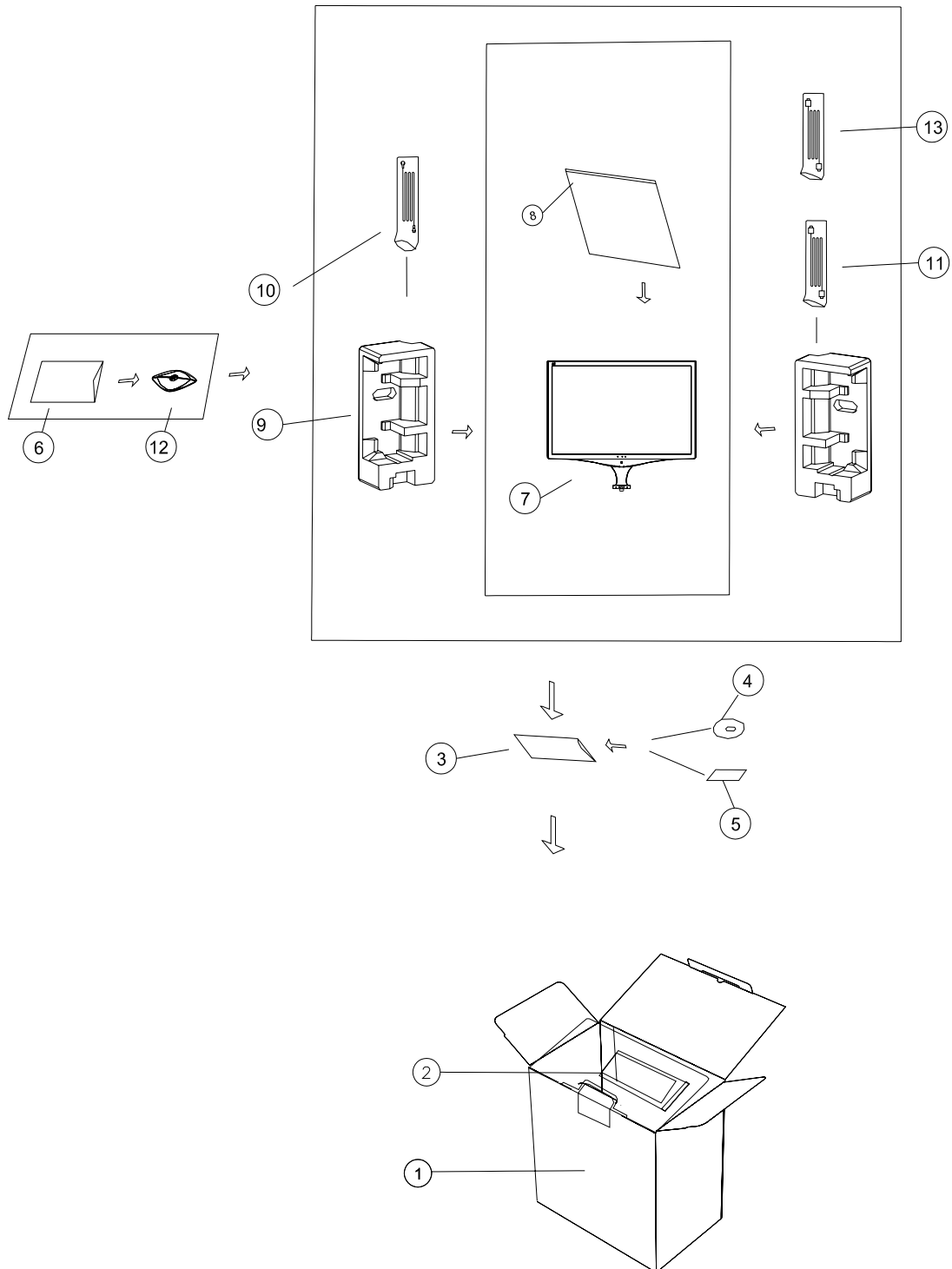
586		S73G25391V	CHOKE COIL ASS'Y	L904		1
587		S73G25391V	CHOKE COIL ASS'Y	L903		1
588		S73L17440VG	TRANSFORMER	L901		1
589		S80GL22T3V	XFMR POWER 490uH TPV-PT	T901		1
590		Q12G6600 6	FOOT			4

## 8. Exploded Diagram And Spare Parts List



ITEM	DESCRIPTION	PART NUMBER	Q'TY
1	BEZEL	A34G0707EC6 L	1
2	BUTTON POWER	A33G0371-C	1
3	Deco_bezel	A33G0363ED1 L	1
4	SCREW	0M1G 130 5120	4
5	PANEL	750GLMCOZ1312N	1
6	SCREW	0M1G1730 6120	2
7	POWER BOARD	PWPC7C42MJBA	1
8	SCREW	0M1G1730 6120	1
9	CONVERSION BOARD	CBPC8MM8VWJ2	1
10	KEPC BOARD	KEPC8JC5	1
11	MAIN FRAME	J15G2262 1	1
12	SPEAKER	078G 502700 Y	1
13	SCREW	0M1G1740 10 47	3
14	HINGE	J37G0077 1	1
15	SCREW	0M1G1740 10 47	4
16	COVER HINGE	A33G0364EC6 L	1
17	Button func	A33G0370ED1 L	1
18	DIECAST	J20G0008 1	1
19	STAND	A34G0709EC6 L	1
20	Deco_stand R	A33G0366ED1 L	1
21	Deco_stand L	A33G0365ED1 L	1
22	Clip cable mgt	A33G0369EC6 L	1
23	SCREW	0M1G 930 10120	1
24	Deco_base L	A33G0367ED1 L	1
25	Deco_base R	A33G0368ED1 L	1
26	BASE	A34G0707EC6 L	1
27	Bkt base	J15G0404 2	1
28	RUBBER FOOT	Q12G6600 6	4
29	M6 SCREW	J01G6022800	1
30	SCREW	0Q1G 130 6120	2
31	SCREW	0Q1G 930 8 47	1
32	REAR COVER	A34G0708EC6 L	1
33	RUBBER VESA	J12G 808 1	4

## Packing For Shipping



ITEM	DESCRIPTION	PART NUMBER	Q'TY
1	CARTON	J44GC042709 3A	1
2	HANDLE1/2	J50G 600 5/6	1
3	PE BAG	J45G 76 28V3A	1
4	CD MANUAL	J70G2201709 2A	1
5	QSG	J41G780270915C	1
6	EPE COVER	J45G 88606 R	1
7	MONITOR	TC8MM8MKWHVSD1J	1
8	PE BAG	J45G 88609700	1
9	EPS	J44GC042 1/2	1
10	POWER CORD	089G402A18N YH	1
11	SIGNAL CABLE	089G 728HAA902	1
12	BASE	A34G0710EC6 L9073	1
13	DVI CABLE	089G1748HAA AD	1



## 9. Disassemble Process

### 9.1 Units Disassemble Process

#### 9.1.1 Tools



- ✧ Glove
- ✧ Big cross screwdriver
- ✧ Small cross screwdriver
- ✧ Prize equipment or abandoned IC card
- ✧ Screw box
- ✧ Cushion
- ✧ Six angle sleeve spanner

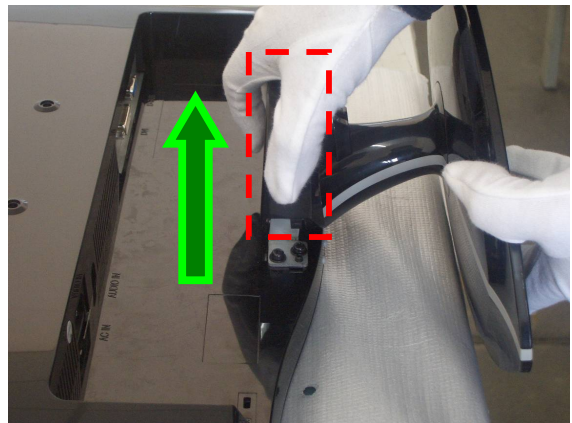
#### 9.1.2 Disassemble process

- 1、Tide up the worktable, spread straight cushion, put the monitor on it, the front side adown. (**Picture 1**)
- 2、Remove the decorate slice of the back cover. (**Picture 2**)
- 3、Disassemble the 4 screws that fix the stand, remove the stand. (**Picture 3**)
- 4、Disassemble the screws of the back cover. (**Picture 4**)
- 5、Prize up the bezel, and rip up the bezel downwards. (as showed in the following the **picture 5,6,7,8**)
- 6、Disassemble the Key board. (**picture 9,10**)
- 7、Remove the bezel, refer to the following **picture 11,12** .
- 8、Disassemble the 4 pins of the backlight, as showed in the following the **picture13,14**.
- 9、Disassemble the 4 fixed screws of the panel, as showed in the following the **picture15,16**.
- 10、Lift up the main frame and lift down the LVDS connectors according to the direction of the arrowhead, refer to the following **picture 17,18**.
- 11、That's all. The disassemble process of the unit is over.

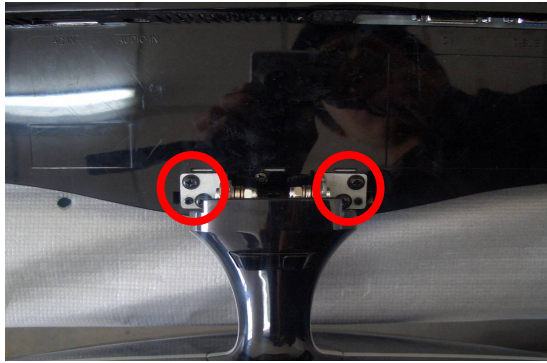
#### 9.1.3 Show pictures:



(Picture 1)



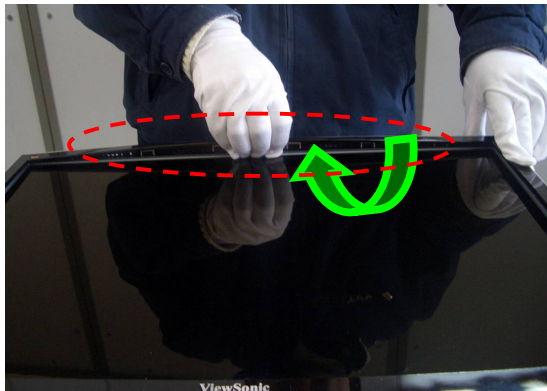
(Picture 2)



(Picture 3)



(Picture 4)



(Picture 5)



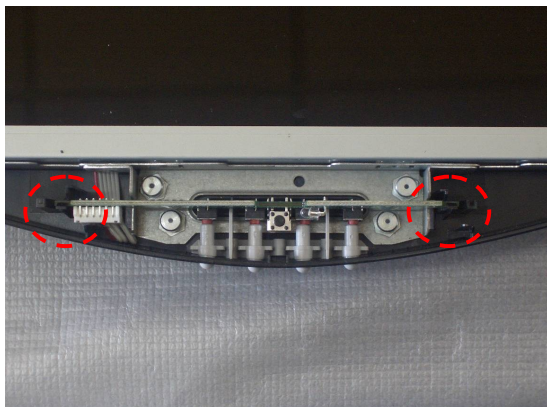
(Picture 6)



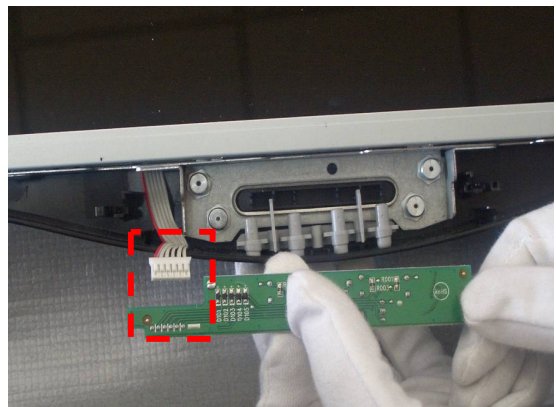
(Picture 7)



(Picture 8)

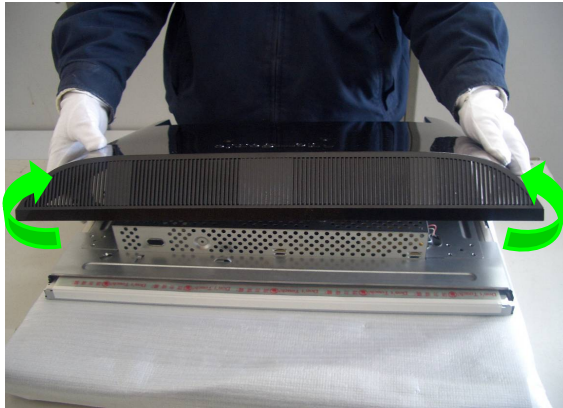


(Picture 9)



(Picture 10)

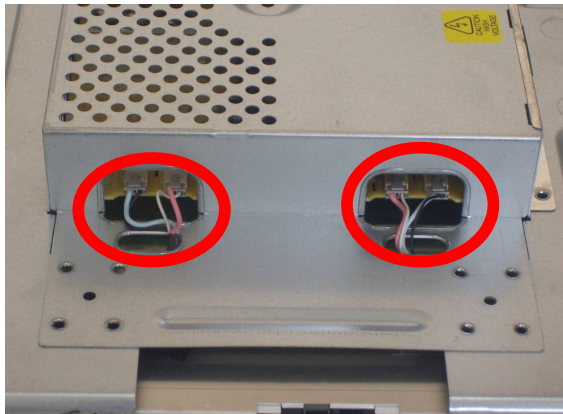




(Picture 11)



(Picture 12)



(Picture 13)



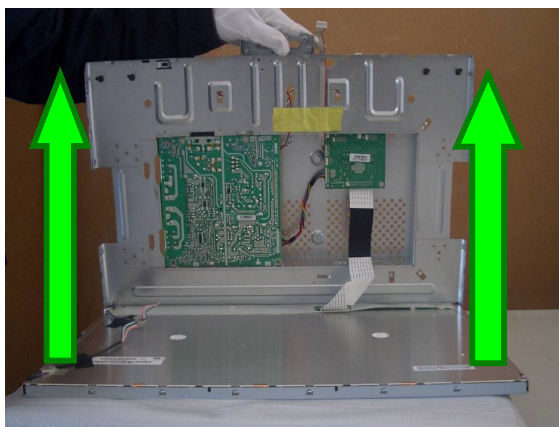
(Picture 14)



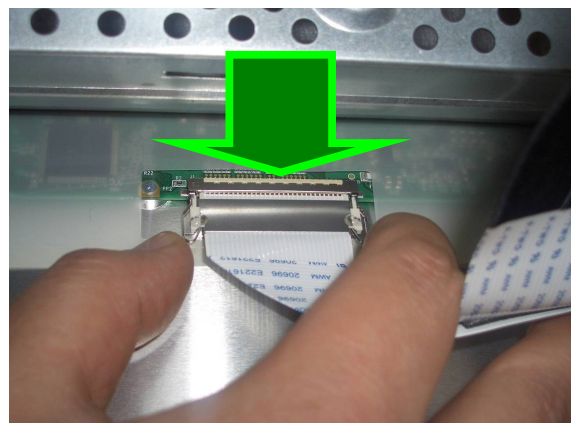
(Picture 15)



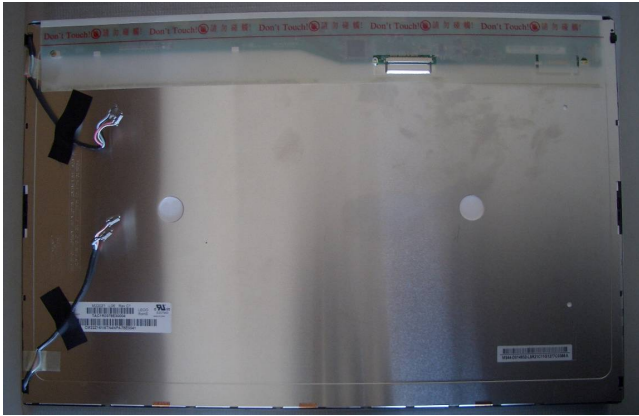
(Picture 16)



(Picture 17)

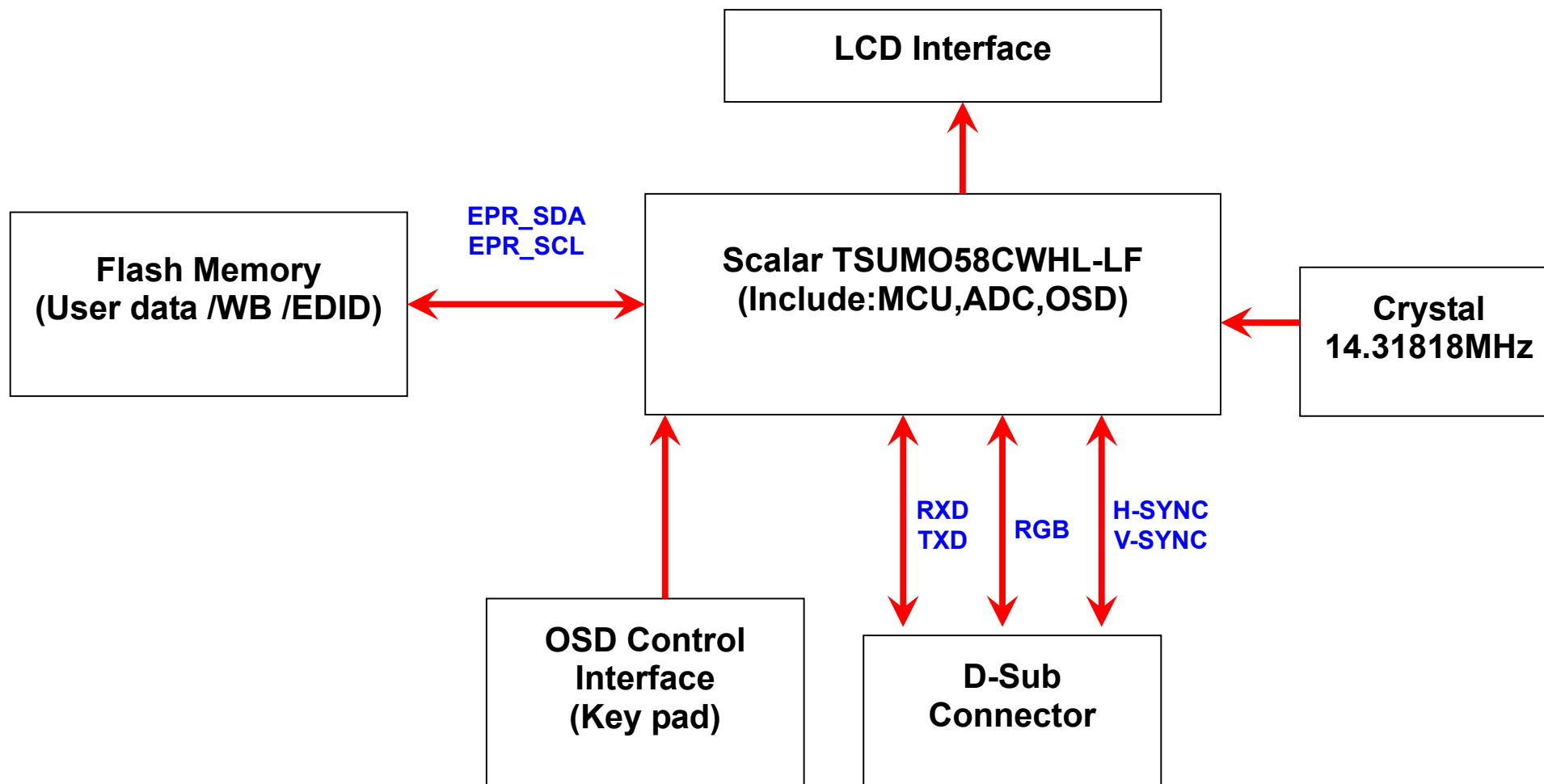


(Picture 18)

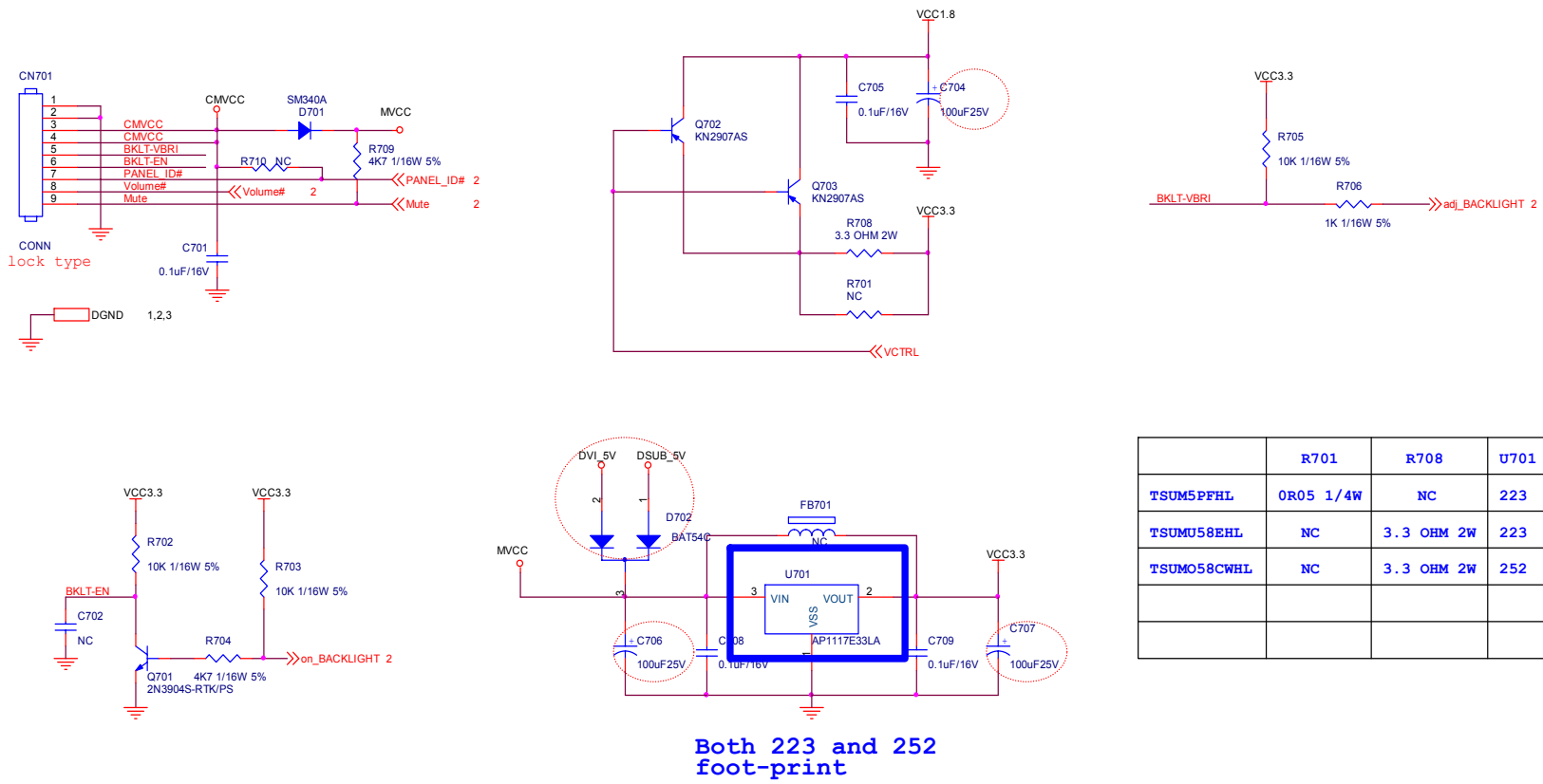


(Picture 19)

## 10. Block Diagram

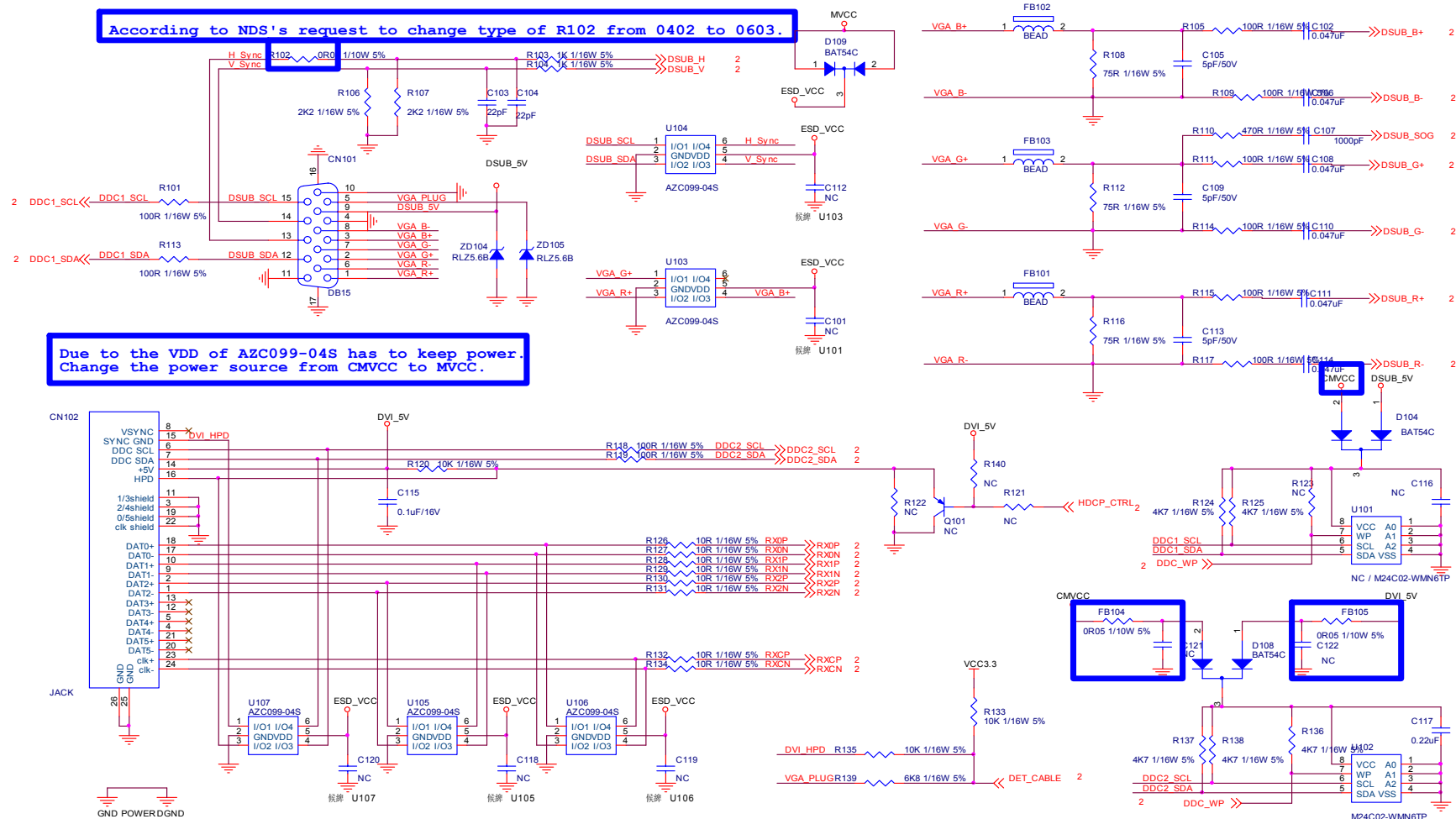


11. Schematic Diagram  
11.1 Power



T P V ( Top Victory Electronics Co., Ltd. )	OEM MODEL	NEW Q SERIES	Size	B
話 爾 瓜 爾 爾	G2883-1-1-X1-080327	TPV MODEL	CBPC8MM8VWJ1	Rev
Key Component	4.0.POWER	PCB NAME	715G2883-1-1	Rev
Date	Tuesday, April 29, 2008	Sheet	4 of 5	

## 11.2 Input



T P V ( Top Victory Electronics Co., Ltd. )		OEM MODEL	NEW Q SERIES	Size	B
話 機 底 座 板	G2883-1-X-1-080327	TPV MODEL	CBPC8MMBWVJ1	Rev	C
Key Component	2.0.INPUT	PCB NAME	715G2883-1-1	修 改	
Date	Tues/day April 29, 2008	Sheet	2 of 5		

**U402**  
For user data, WB, EDID, HDCP are saved in Flash.

**PMC**  
For WB, EDID, HDCP are saved in Flash.

**U402**  
010A Befor AOC ID2007 OSD  
020A For ID2008

**U403**  
SST For user data, WB, EDID are saved in Flash.  
PMC For WB, EDID are saved in Flash.

**U403**  
NC

**R440**  
10K

**R441**  
10K

**R442**  
10K

**R443**  
10K

**C423**  
0.22uF/16V

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

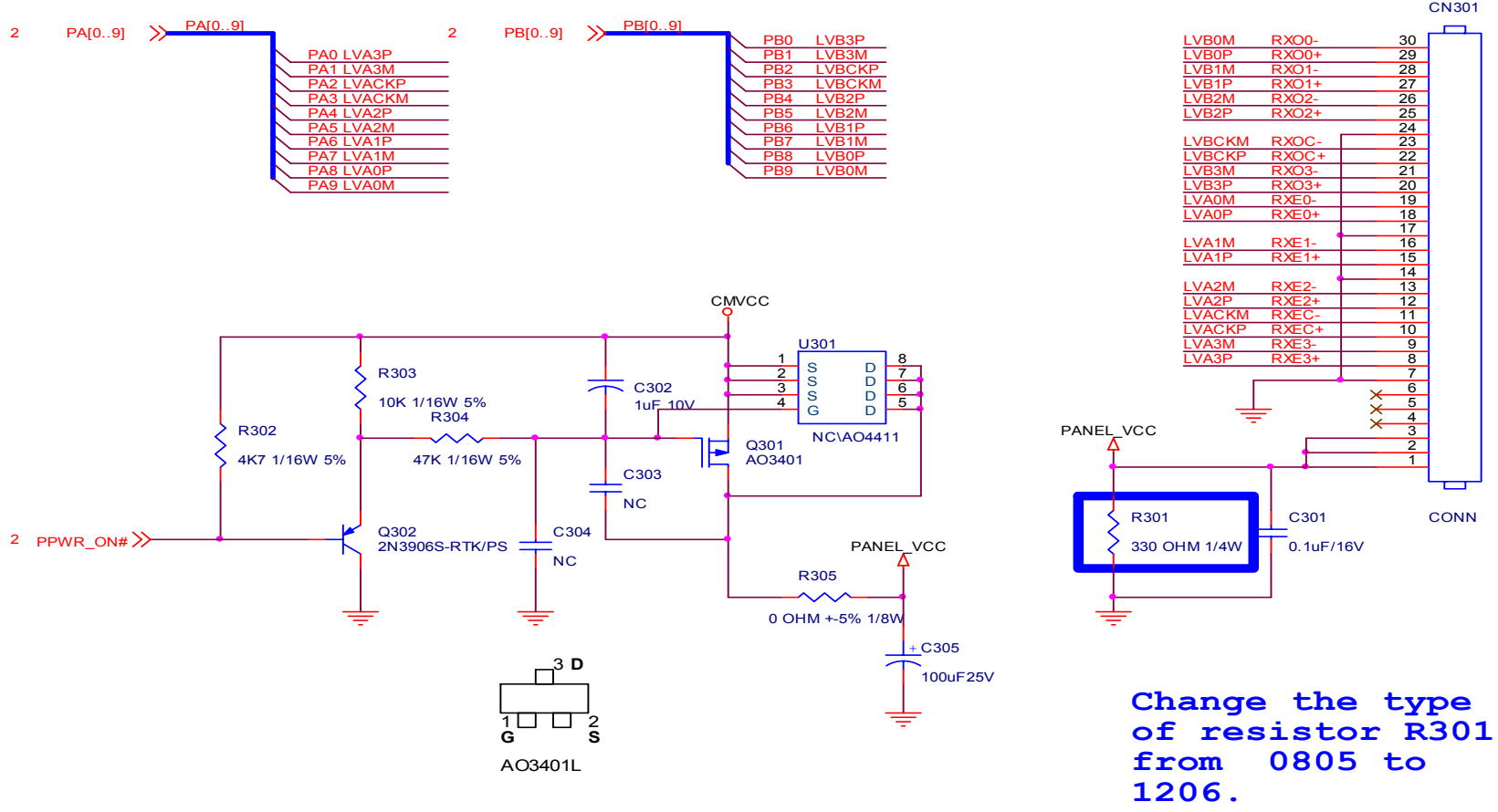
Component	Value
R405	NC
R407	NC
C416	NC
Q401	NC
R123	NC
R136	NC

**Table of Component Values:**

Component	Value
R405	NC
R407	NC
C416	NC

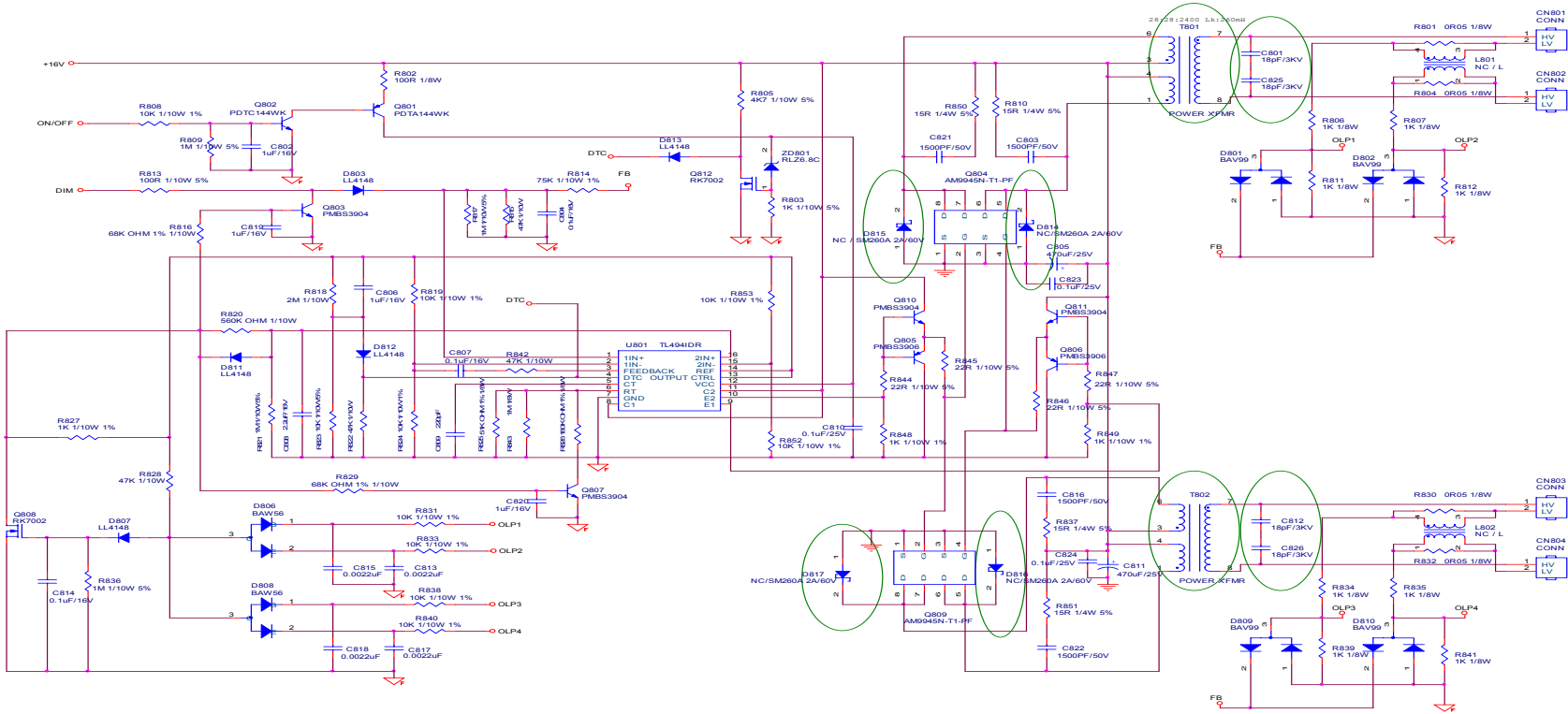


11.4 Panel Interface



TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	NEW Q SERIES	Size	A
紙隔瓜網腹	G2883-1-1-X-1-080327	TPV MODEL	Rev	C
Key Component	3.0.OUTPUT	PCB NAME	称爹	
Date	Tuesday, April 29, 2008	Sheet		

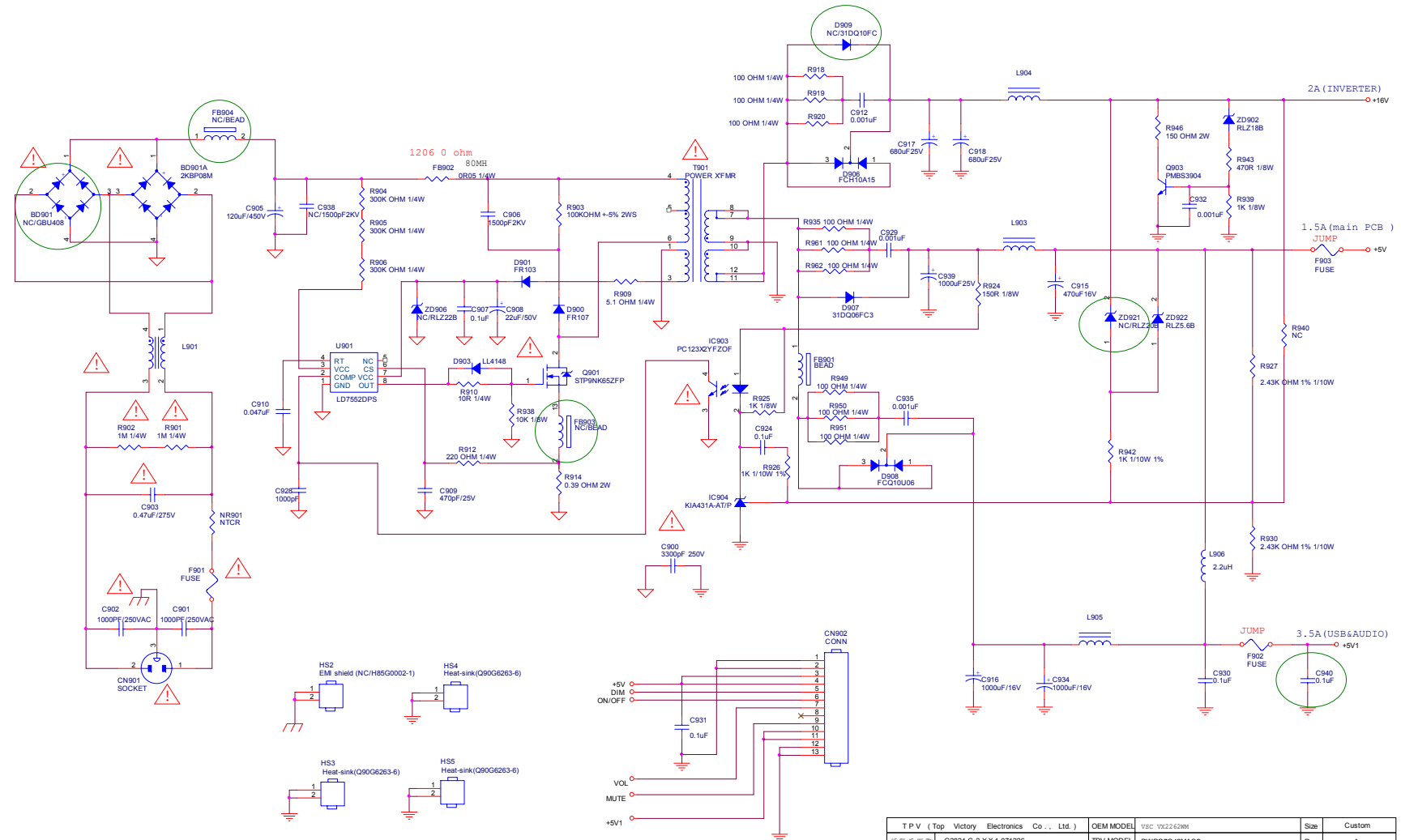
11.5 Inverter



T P V ( Top Victory Electronics Co., Ltd. )	OEM MODEL	V2C VX2262WM	Size	Custom
宏图电子	G2824-C-2-X-1-071228	TPV MODEL	PWPC7C42MAC2	Rev
Key Component	03.INVERTER	PCB NAME	715G2824-C-2	ODM MODEL
Date	Thursday, December 27, 2007	Sheet	3 of 4	

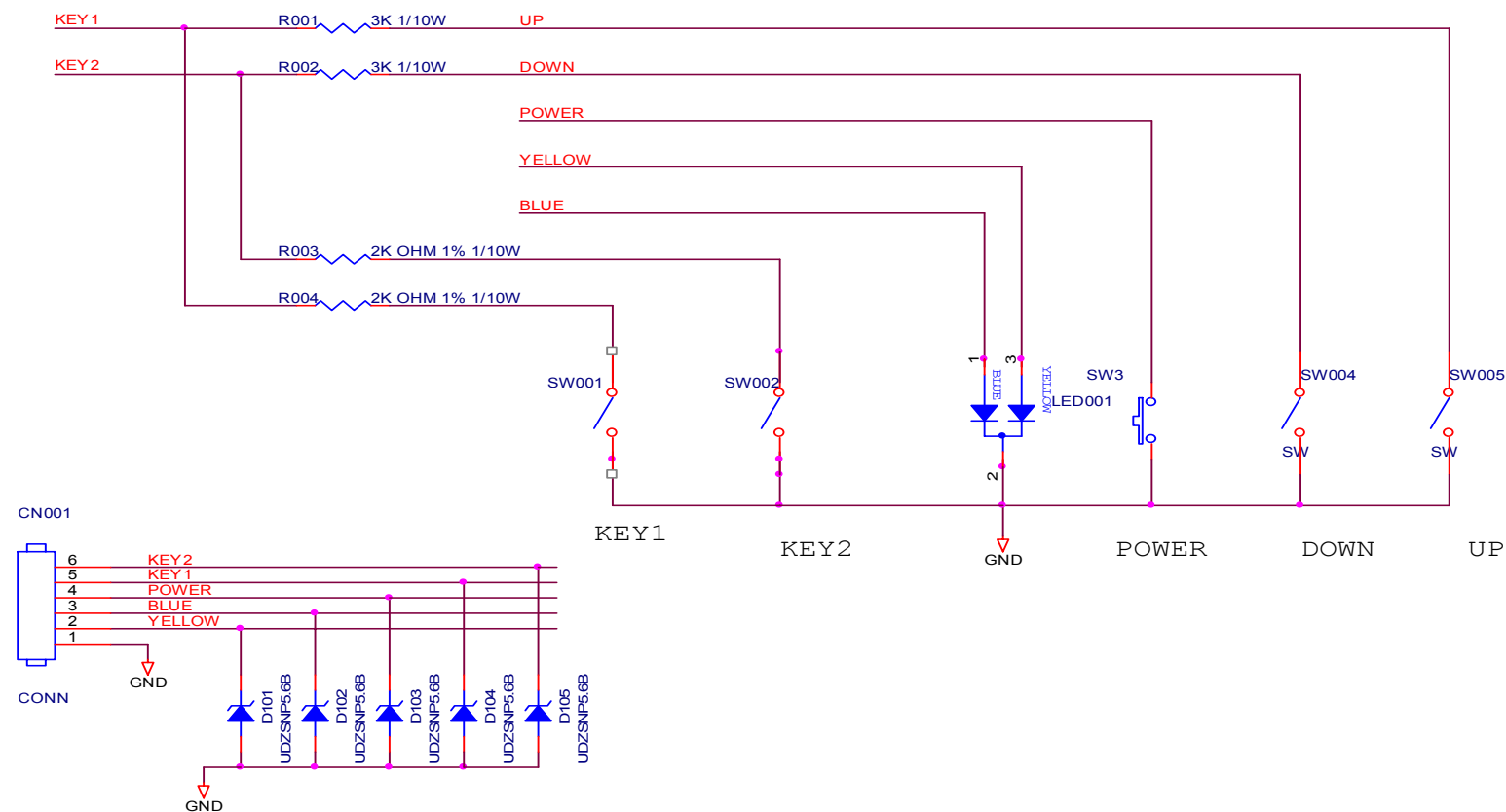
AOC (Top Victory) Electronics Co., Ltd.	
Title	
PWPC942GR1P	
Size	Document Number
Date	Thursday, December 27, 2007
Sheet	1 of 2

## 11.6 A-D Power



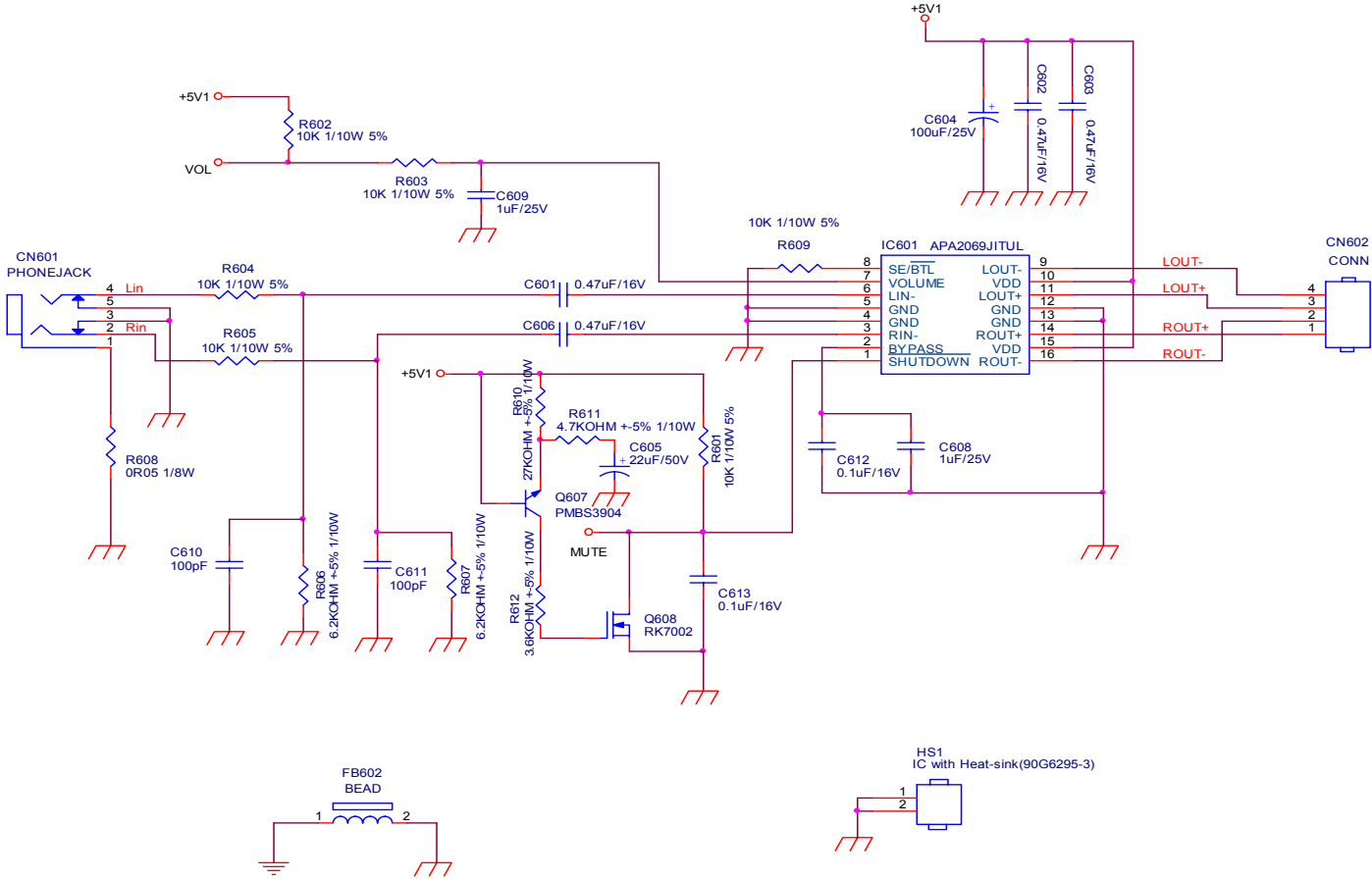
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	V3C V02262WM	Size	Custom
產品代號	G2824-C-2-X-X-1-071226	TPV MODEL	PWPC7C42MAC2	Rev
Key Component	2.POWER	PCB NAME	715G2824-C-2	Rev
Date	Thursday, December 27, 2007	Sheet	2 of 4	ODM MODEL

11.7 Key Pad



T P V ( Top Victory Electronics Co . , Ltd. )		OEM MODEL	VX2262wm	Size	A
結 隔 瓜 網 腹	G2970-A-X-X-2-071229	TPV MODEL	KEPC8JC5	Rev	C
Key Component	1. Key board	PCB NAME	715G2970-A	称爹	<称爹>
Date	Thursday, January 03, 2008	Sheet	2 of 2		

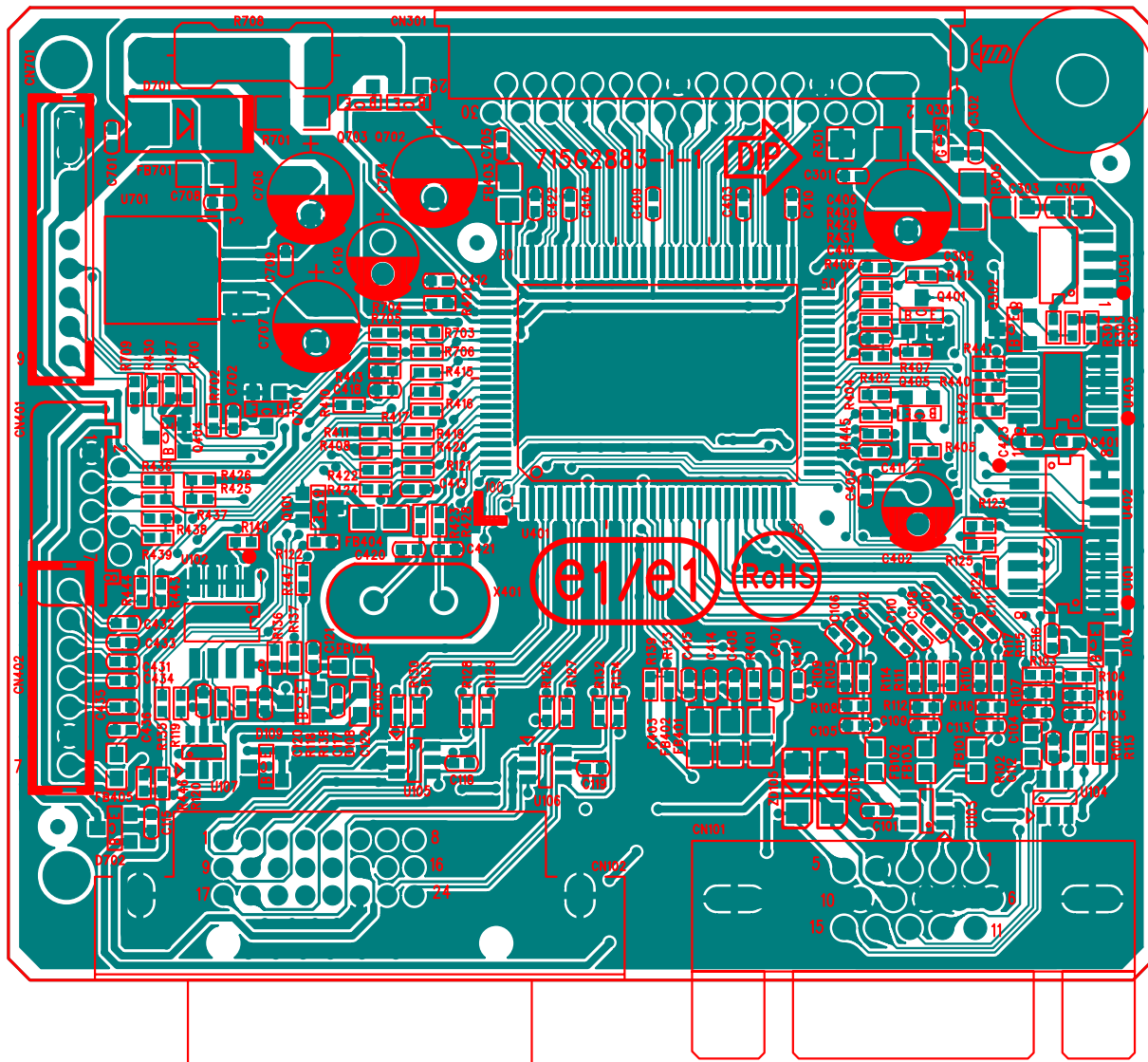
11.8 Audio



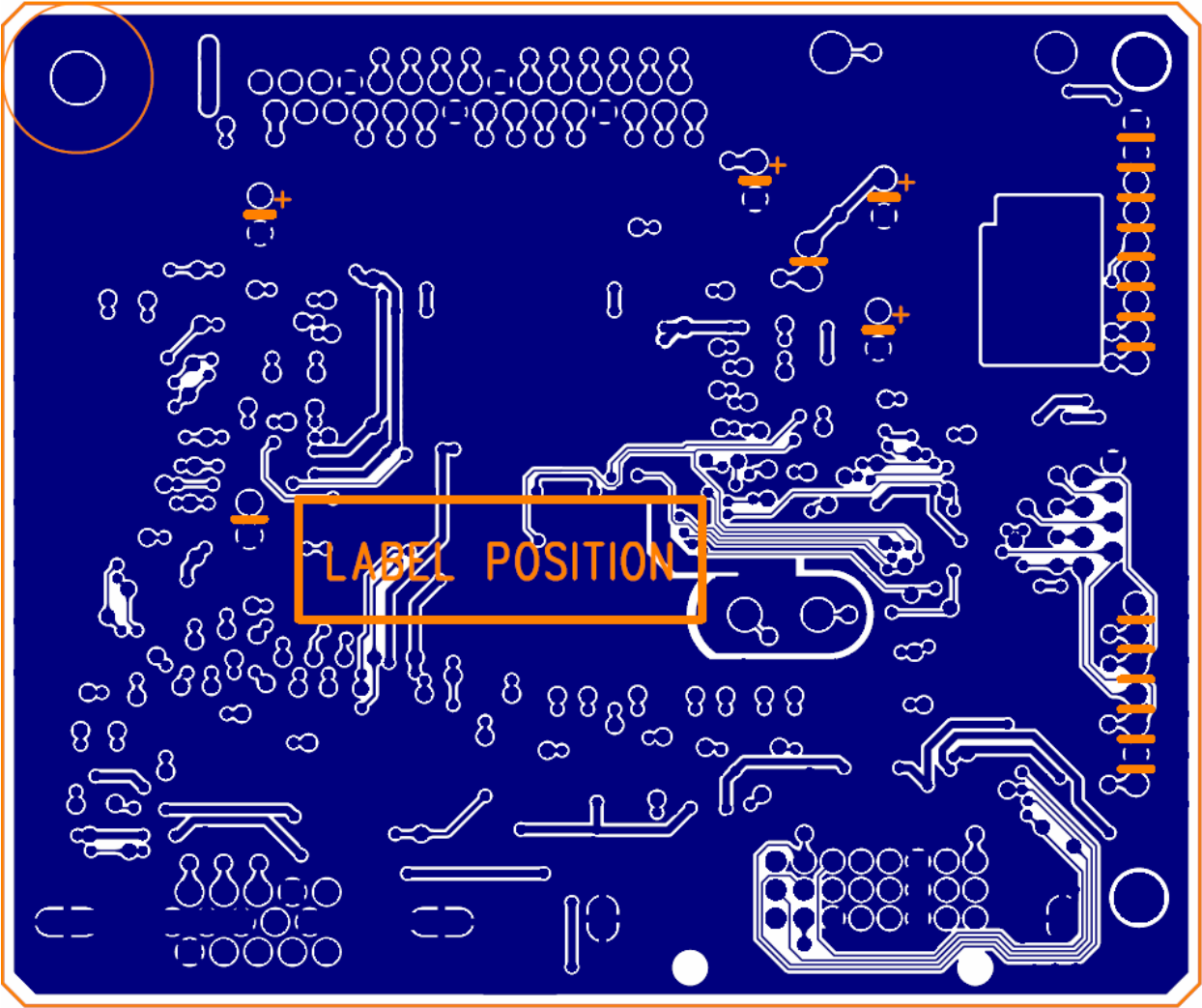
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL		VSC VX2262WM	Size	Custom
話 隔 瓜 網 版	G2824-C-2-X-X-1-07126	TPV MODEL	PWPC7C42MAC2	Rev	D
Key Component	04.AUDIO	PCB NAME	715G2824-C-2	称爹	ODM MODEL
Date	Thursday, December 27, 2007	Sheet	4 of 4		

## 12. PCB Layout Diagram

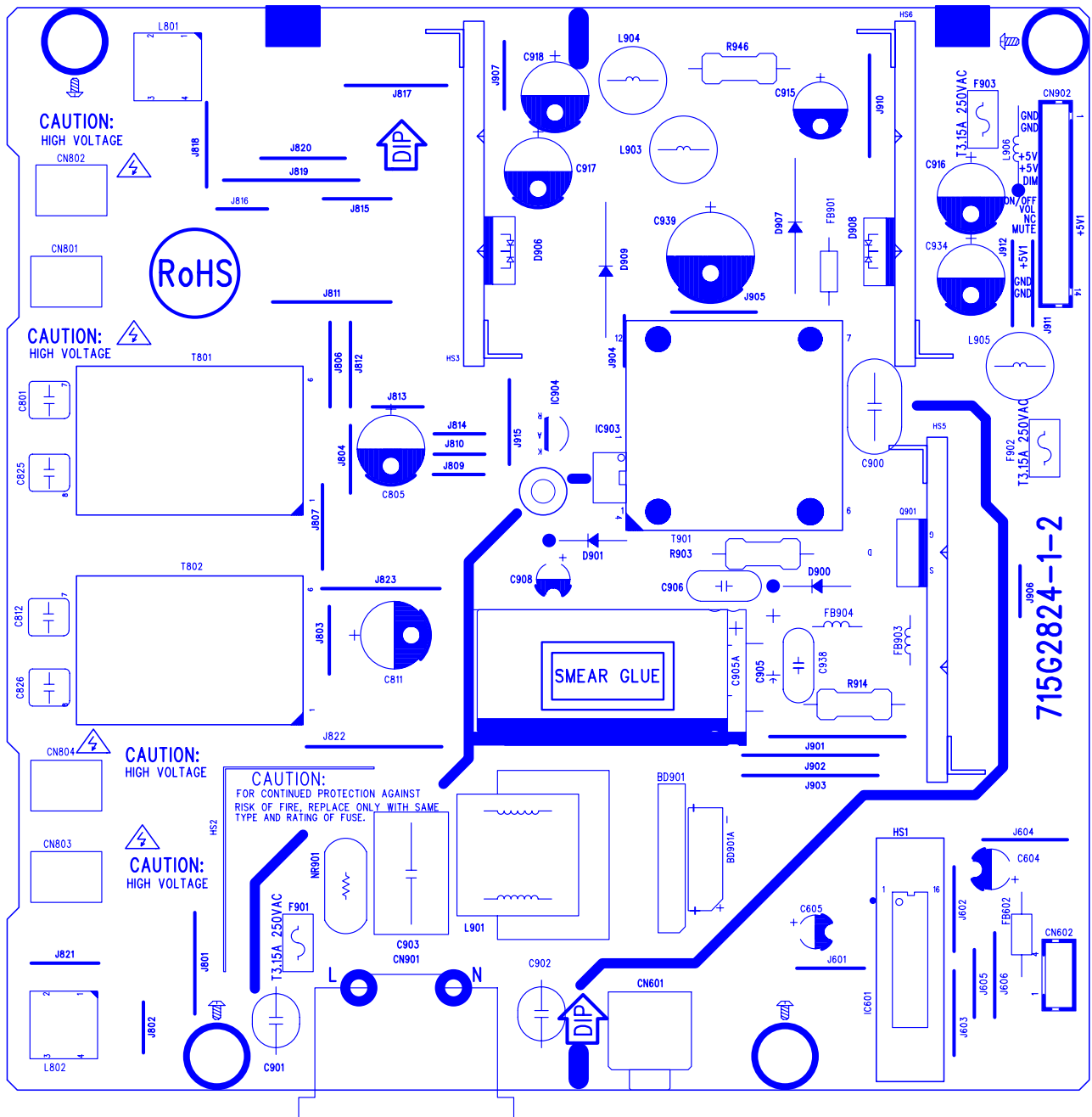
### 12.1 MAIN BOARD PCB TOP VIEW



12.2 MAIN BOARD PCB BUTTON VIEW

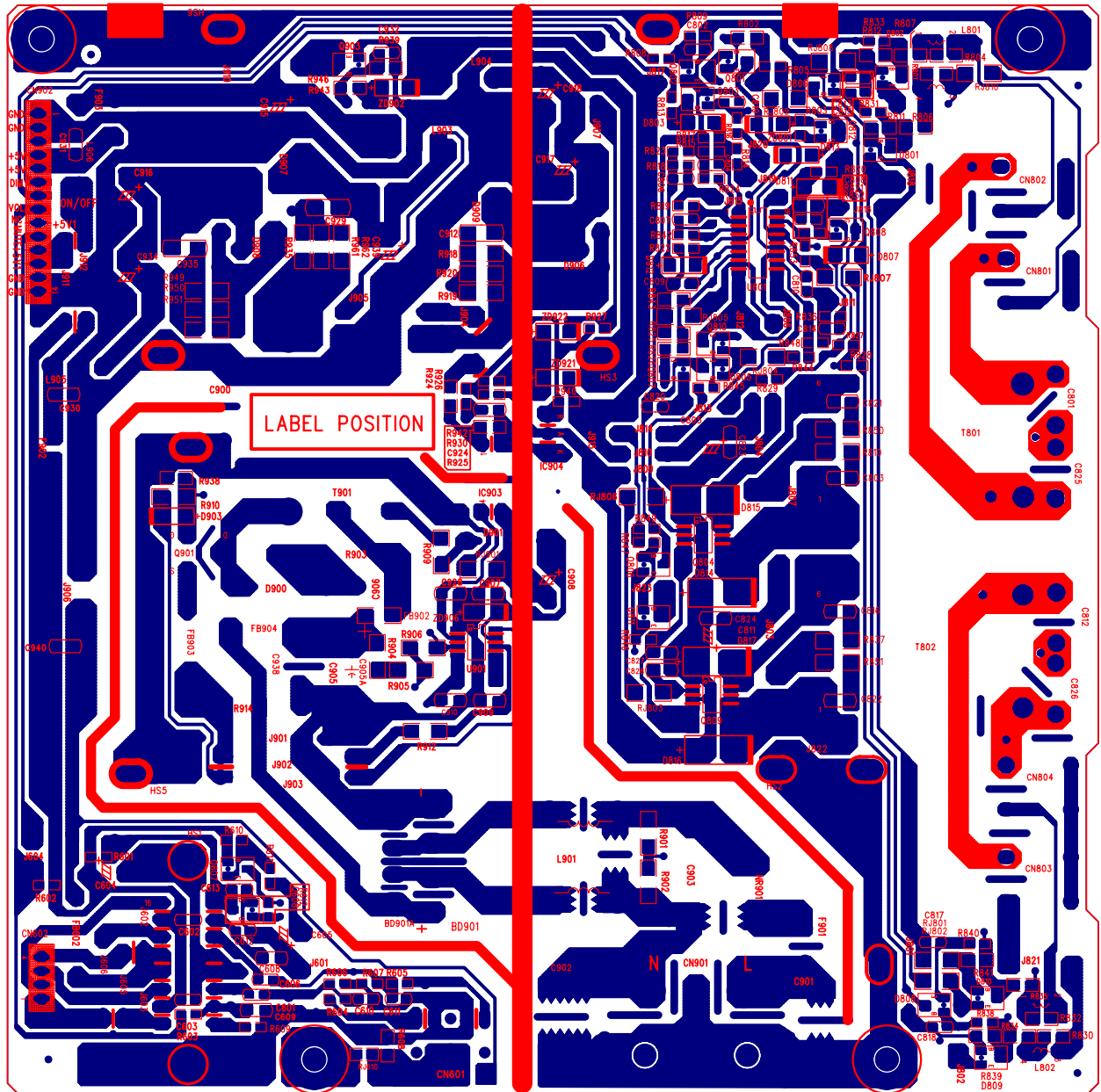


### 12..3 POWER PCB TOP VIEW

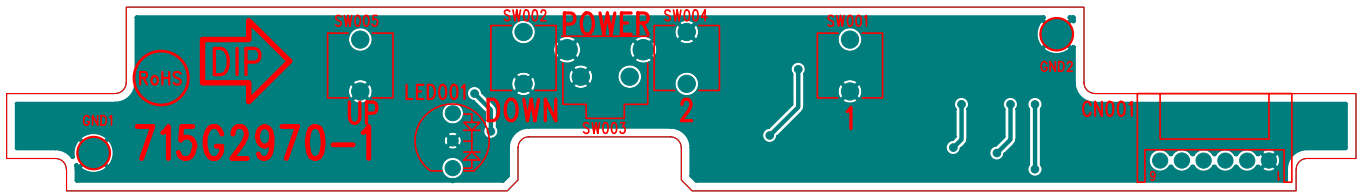




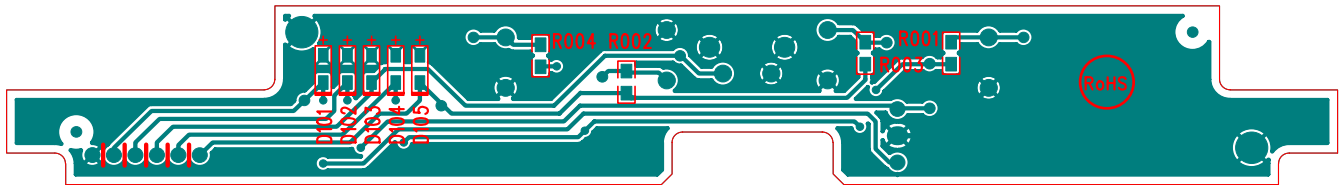
## 12.4 POWER PCB BUTTON VIEW



## 12.5 KEY BOARD TOP VIEW



## 12.6 KEY BOARD BUTTON VIEW



**\* Reader's Response \***

Dear Readers:

Thank you in advance for your feedback on our Service Manual, which allows continuous improvement of our products. We would appreciate your completion of the Assessment Matrix below, for return to ViewSonic Corporation.

**Assessment**

A. What do you think about the content after reading **VX2262wm/wmp** Service Manual?

<b>Unit</b>	<b>Excellent</b>	<b>Good</b>	<b>Fair</b>	<b>Bad</b>
1. Precautions And Safety Notice				
2. Specification				
3. Front Panel Control and Indicators				
4. Circuit Description				
5. Adjustment Procedure				
6. Troubleshooting Flow Chart				
7. Recommended Spare Parts List				
8. Exploded Diagram And Spare Parts List				
9. Block Diagram				
10. Schematic Diagram				
11. PCB Layout Diagram				

B. Are you satisfied with the **VX2262wm/wmp** Service Manual?

<b>Item</b>	<b>Excellent</b>	<b>Good</b>	<b>Fair</b>	<b>Bad</b>
1. Service Manual Content				
2. Service Manual Layout				
3. The form and listing				

C. Do you have any opinion and suggestion about this Service Manual?

**Reader's Basic Data:**

Name:		Title:	
Company:			
Add:			
Tel:		Fax :	
E-Mail:			

After completing this form, please return it to ViewSonic Quality Assurance in the USA at facsimile 1-909-839-7943. You may also e-mail any suggestion to the Director, Quality System & Process (marc.maupin@viewsonic.com)